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STRUCTURE FILE UPDATES: 18 AUG 2004 HIGHEST RN 728239-10-9 DICTIONARY FILE UPDATES: 18 AUG 2004 HIGHEST RN 728239-10-9

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> file hcaplus FILE 'HCAPLUS' ENTERED AT 09:21:12 ON 20 AUG 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 20 Aug 2004 VOL 141 ISS 8 FILE LAST UPDATED: 18 Aug 2004 (20040818/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

76,810 structures from This query which Covers all of claims 10 4 11

```
VAR G1=12/10/14
 NODE ATTRIBUTES:
 DEFAULT MLEVEL IS ATOM
          IS MCY UNS AT 10 IS PCY UNS AT 12
 GGCAT
                            10
 GGCAT
 DEFAULT ECLEVEL IS LIMITED
 GRAPH ATTRIBUTES:
 RSPEC 1
 NUMBER OF NODES IS
 STEREO ATTRIBUTES: NONE
                   SCR 172 AND 1839 AND 1993
 L4
            76810 SEA FILE=REGISTRY SSS FUL L1 AND L2
 L5
            42760 SEA FILE=HCAPLUS ABB=ON L4
          295041 SEA FILE=HCAPLUS ABB=ON L5(L) (HAIR OR KERAT?)
295041 SEA FILE=REGISTRY ABB=ON POLYACRYLIC/PCT — polymer class term
394181 SEA FILE=HCAPLUS ABB=ON L12
368 SEA FILE=HCAPLUS ABB=ON L6(L) DYE?
52 SEA FILE=HCAPLUS ABB=ON L19 AND (?ACRYL? OR L13)
49 SEA FILE=HCAPLUS ABB=ON L20 AND COSMETIC?/SC, SX

49 CA references on whility
all 1-49 hitstr
 L6
              461 SEA FILE=HCAPLUS ABB=ON L5(L)(HAIR OR KERAT?)
 L12
 L13
L19
L20
L21
=> d 121 all 1-49 hitstr
L21 ANSWER 1 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
      2004:549680 HCAPLUS
      141:76361
      Entered STN: 09 Jul 2004
ED
      Hair dye foams containing water-soluble polymers
      Nishimoto, Hiroaki; Ishii, Takeharu
      Mandom Corp., Japan
      Jpn. Kokai Tokkyo Koho, 10 pp.
      CODEN: JKXXAF
DΤ
      Patent
LA
      Japanese
TC
      ICM A61K007-13
      62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
      PATENT NO.
                           KIND
                                    DATE
                                                 APPLICATION NO.
                                                                           DATE
      -----
                                                 ______
PI
     JP 2004189634
                           Α2
                                    20040708
                                                 JP 2002-356841
                                                                           20021209
PRAI JP 2002-356841
                                    20021209
CLASS
 PATENT NO.
                  CLASS PATENT FAMILY CLASSIFICATION CODES
 _____
                  ----
 JP 2004189634 ICM
                          A61K007-13
 JP 2004189634 FTERM 4C083/AB051; 4C083/AB132; 4C083/AB232; 4C083/AB432;
                           4C083/AC012; 4C083/AC101; 4C083/AC102; 4C083/AC122;
                           4C083/AC181; 4C083/AC182; 4C083/AC432; 4C083/AC442;
                           4C083/AC482; 4C083/AC642; 4C083/AC691; 4C083/AC692;
                           4C083/AC812; 4C083/AD011; 4C083/AD091; 4C083/AD092;
                          4C083/AD162; 4C083/BB04; 4C083/BB06; 4C083/BB23;
                          4C083/BB24; 4C083/BB49; 4C083/CC36
AΒ
     This invention relates to hair dye foams comprising water-soluble polymers,
     dyes, cationic surfactants, nonionic surfactants, ethanol, water, and
     propellants. The compns. give excellent hair colors and do not cause
     aerosol valve clogging. For example, a hair dye foam contained ethanol
```

10, stearyltrimethylammonium chloride 0.5, N-methacryloyloxyethyl N, N-dimethylammonium- α -N-methylcarboxybetaine-alkyl methacrylate copolymer 4, ethoxylated hydrogenated castor oil 0.5, carbon black 0.6, Japan Yellow 205 0.1, Japan Red 404 0.3, concentrated glycerin 1, panthenol 0.5, methylparaben 0.1, liquefied petroleum gas 10, perfumes q.s., distd water balance to 100 %. SThair dye foam methacrylate methacryloyloxyethyldimethylammo niumbetaine copolymer IT Surfactants (cationic; hair dye foams containing polymers and surfactants and dyes) IT Hair preparations (dyes, foams; hair dye foams containing polymers and surfactants and dyes) ΙT Carbon black, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dye foams containing polymers and surfactants and dyes) IT Castor oil RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hydrogenated, ethoxylated; hair dye foams containing polymers and surfactants and dyes) ΙT Surfactants (nonionic; hair dye foams containing polymers and surfactants and dyes) ΤТ 64-17-5, Ethanol, biological studies 79-41-4D, Methacrylic acid, alkyl esters, copolymers with carboxymethyl (methacryloyloxy)ethyl]dimethylbetaine 112-03-8, Stearyltrimethylammonium chloride 147-14-8, Japan blue 404 6358-85-6, Japan yellow 205 **6448-95-9** , Japan red 404 9002-92-0, Polyoxyethylene lauryl ether Polyoxyethylene cetyl ether 9005-67-8, Polyoxyethylene sorbitan monostearate 62723-61-9D, copolymers with alkyl methacrylate RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dye foams containing polymers and surfactants and dves) ΙT 6448-95-9, Japan red 404 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dye foams containing polymers and surfactants and dyes) RN 6448-95-9 HCAPLUS 2-Naphthalenecarboxamide, 3-hydroxy-4-[(2-methyl-5-nitrophenyl)azo]-N-CNphenyl- (9CI) (CA INDEX NAME)

```
L21 ANSWER 2 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
 AN
      2004:510123 HCAPLUS
 DN
     141:59182
 ED
      Entered STN: 24 Jun 2004
     Compositions containing a direct dye and a specific polymer for coloring
      of hair fibers
 ΤN
     Guerin, Frederic; Samain, Henri
 PΑ
     L'oreal, Fr.
 SO
     Eur. Pat. Appl., 15 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     French
IC
     ICM A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                          APPLICATION NO.
     -----
                        ____
                                _____
     EP 1430876
                         A1 20040623 EP 2003-293258 20031219
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     FR 2848834 A1 20040625
                                          FR 2002-16205
                                                                 20021219
PRAI FR 2002-16205
                         Α
                                20021219
CLASS
 PATENT NO.
              CLASS PATENT FAMILY CLASSIFICATION CODES
 -----
 EP 1430876 ICM A61K007-13
EP 1430876 ECLA A61K008/81K6; A61Q005/10
FR 2848834 ECLA A61K008/81K6; A61Q005/10
     Compns. contain a direct dye and a specific polymer for coloring of hair
     fibers. The compns. comprise a direct dye, a water-soluble polymer, and an
     agent for increasing the viscosity.
ST
     hair direct dye polymer viscosity enhancer
ΙT
     Alcohols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (C1-4; compns. containing direct dye and polymer for coloring of hair
        fibers)
TT
     Ketones, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (C3-4; compns. containing direct dye and polymer for coloring of hair
        fibers)
ΙT
     Alkanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (C5-10; compns. containing direct dye and polymer for coloring of hair
        fibers)
ΙT
     Phenols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (amino, dyes; compns. containing direct dye and polymer for coloring of
       hair fibers)
IT
     Surfactants
        (amphoteric; compns. containing direct dye and polymer for coloring of hair
       fibers)
IT
    Polyelectrolytes
    Surfactants
        (anionic; compns. containing direct dye and polymer for coloring of hair
       fibers)
IT
        (azomethine; compns. containing direct dye and polymer for coloring of hair
       fibers)
ΙT
    Dyes
```

Polyelectrolytes Surfactants (cationic; compns. containing direct dye and polymer for coloring of hair fibers) IT Antioxidants Azo dyes Dispersing agents Electrolytes Fluorescent dyes Human Opacifiers Perfumes Polyelectrolytes Preservatives Sequestering agents Solvents Surfactants Thickening agents Viscosity (compns. containing direct dye and polymer for coloring of hair fibers) Acids, biological studies Alkali metal hydroxides Polymers, biological studies Tannins RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (compns. containing direct dye and polymer for coloring of hair fibers) ITHair preparations (conditioners; compns. containing direct dye and polymer for coloring of hair fibers) ΙT Hair preparations (creams; compns. containing direct dye and polymer for coloring of hair IT(direct; compns. containing direct dye and polymer for coloring of hair fibers) IT Phenols, biological studies Porphyrins RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (dyes; compns. containing direct dye and polymer for coloring of hair fibers) ΙT Hair preparations (gels; compns. containing direct dye and polymer for coloring of hair fibers) TI Hair preparations (lotions; compns. containing direct dye and polymer for coloring of hair fibers) ΙT Phenols, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (naphthols, dyes; compns. containing direct dye and polymer for coloring of hair fibers) IT Surfactants (nonionic; compns. containing direct dye and polymer for coloring of hair fibers) ΙT Amines, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (phenolic, dyes; compns. containing direct dye and polymer for coloring of hair fibers) IT Carboxylic acids, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

```
(polycarboxylic, salts; compns. containing direct dye and polymer for
        coloring of hair fibers)
ΙT
     Carboxylic acids, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polycarboxylic; compns. containing direct dye and polymer for coloring of
        hair fibers)
IT
     Alcohols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polyhydric, ethers; compns. containing direct dye and polymer for coloring
        of hair fibers)
ΙT
     Phenols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polyphenols, nonpolymeric; compns. containing direct dye and polymer for
        coloring of hair fibers)
ΙT
     Hair preparations
        (sprays; compns. containing direct dye and polymer for coloring of hair
        fibers)
IT
     Polymers, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (water-soluble; compns. containing direct dye and polymer for coloring of
hair
        fibers)
IT
     64-19-7D, Acetic acid, C1-4 alkyl esters
                                               69-72-7, o-Hydroxybenzoic acid,
                         72-48-0, Alizarin 79-06-1D, Acrylamide,
     biological studies
               79-10-7D, Acrylic acid, polymers 81-48-1, Solvent
               81-54-9, Purpurin 82-33-7 83-72-7, Lawsone
                                                                 85-23-4,
     Spinulosin 87-66-1, Pyrogallol
                                       87-69-4, Tartaric acid, biological
             88-99-3, Phthalic acid, biological studies 91-56
Basic Blue 17 96-91-3, 2-Amino-4,6-dinitrophenol
                                                           91-56-5, Isatin
     92-31-9, Basic Blue 17
                                                                   99-06-9,
    m-Hydroxybenzoic acid, biological studies
                                               99-56-9, 1,2-Diamino-4-
    nitrobenzene 99-57-0, 2-Amino-4-nitrophenol
                                                    99-96-7, p-Hydroxybenzoic
     acid, biological studies
                              100-51-6, Benzyl alcohol, biological studies
     108-46-3, Resorcinol, biological studies
                                              110-71-4
                                                         116-85-8, Disperse
                                               124-04-9, Adipic acid,
            121-88-0, 2-Amino-5-nitrophenol
    biological studies 128-95-0, Disperse Violet 1
                                                      139-85-5,
    Protocatechuic aldehyde 144-62-7, Oxalic acid, biological studies
                                               299-27-4, Potassium Gluconate
    149-91-7, Gallic acid, biological studies
    458-37-7, Curcumin 477-73-6, Basic Red 2
                                                 481-39-0, Juglone
    Gluconic acid
                   526-95-4D, Gluconic acid, salts
                                                      527-07-1, Sodium
    Gluconate 548-62-9, Basic Violet 3 569-77-7, Purpurogallin
    587-98-4, Acid Yellow 36 610-81-1, 4-Amino-3-nitrophenol
    632-99-5, Basic Violet 14 633-03-4, Basic Green 1 633-96-5,
    Acid Orange 7 1064-48-8, Acid Black 1 1151-98-0, Apigenidin
    1220-94-6, Disperse Violet 4 1260-17-9, Carminic acid
                                                             1320-07-6, Acid
    Orange 24
                1694-09-3, Acid Violet 49 1934-21-0, Acid Yellow 23
    2390-60-5, Basic Blue 7 2475-45-8, Disperse Blue 1 2475-46-9, Disperse
             2580-56-5, Basic Blue 26 2706-28-7, Acid Yellow 9
                2872-48-2, Disperse Red 11 3179-89-3, Disperse Red 17
    3179-90-6, Disperse Blue 7 3486-30-4, Acid Blue 7 3567-66-6,
    Acid Red 33
                  4368-56-3, Acid Blue 62 4430-18-6, Acid Violet 43
    4926-55-0
                5307-14-2, 1,4-Diamino-2-nitrobenzene
                                                        6358-09-4
                6472-57-7, Acid Blue 91 6915-15-7, Malic acid
    6441-93-6
    9003-06-9, Acrylic acid-Acrylamide copolymer
    10442-83-8
                12217-41-3, Basic Blue 22
                                             12221-52-2, Basic Red 22
                18499-92-8, Kermesic acid
    13556-29-1
                                             19222-41-4, Ammonium Gluconate
    20721-50-0, Disperse Black 9 22036-97-1
                                              22366-99-0
    23946-41-0
                24905-87-1 26381-41-9, Basic Brown 16
    26590-05-6, Acrylamide-diallyldimethylammonium chloride
                            33229-34-4 47569-30-2 50610-28-1 52136-23-9
    copolymer
                29705-39-3
```

```
52136-25-1
                  52551-67-4
                                56330-88-2
                                             56932-44-6
                                                          56932-45-7
     59820-43-8
                  59820-63-2
                                65235-31-6
                                             66095-81-6
                                                          66612-11-1
     66612-19-9
                  68123-13-7, Basic Blue 99
                                               68259-00-7 68391-30-0,
     Basic Red 76
                    68391-31-1, Basic Yellow 57
                                                   68651-46-7, Indigo
     69418-26-4 74153-51-8
                             77061-58-6
                                           80062-31-3
     81612-54-6
                  82576-75-8
                               84041-77-0
                                             86419-68-3
                                                          97404-02-9
     99788-75-7
                  104333-00-8
                                104516-93-0 108388-79-0
                                                           131657-78-8
     141973-33-3
                   154442-49-6 176742-32-8, Basic Brown 17
     359868-06-7
                   360069-60-9, C.I. Disperse Violet 15
                                                           708270-17-1
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (compns. containing direct dye and polymer for coloring of
        hair fibers)
IT
     587-98-4, Acid Yellow 36 633-96-5, Acid Orange 7
     1064-48-8, Acid Black 1 1934-21-0, Acid Yellow 23
     2706-28-7, Acid Yellow 9 3567-66-6, Acid Red 33
     6441-93-6 9003-06-9, Acrylic acid-
     Acrylamide copolymer 20721-50-0, Disperse Black 9
     22036-97-1 26381-41-9, Basic Brown 16 26590-05-6
     , Acrylamide-diallyldimethylammonium chloride copolymer
     68391-30-0, Basic Red 76 69418-26-4 74153-51-8
     108388-79-0 176742-32-8, Basic Brown 17
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (compns. containing direct dye and polymer for coloring of
        hair fibers)
RN
     587-98-4 HCAPLUS
CN
     Benzenesulfonic acid, 3-[[4-(phenylamino)phenyl]azo]-, monosodium salt
     (9CI) (CA INDEX NAME)
```

Na

RN 633-96-5 HCAPLUS
CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

RN 2706-28-7 HCAPLUS

CN Benzenesulfonic acid, 2-amino-5-[(4-sulfophenyl)azo]-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 3567-66-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-amino-4-hydroxy-3-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 6441-93-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-4-hydroxy-3-[(2-

ELHILO 09/663942 8/20/04 Page 10

methylphenyl)azo]-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 9003-06-9 HCAPLUS

CN 2-Propenoic acid, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 79-06-1 CMF C3 H5 N O

$$\begin{matrix} \text{O} \\ || \\ \text{H}_2\text{N-C-CH----} \text{CH}_2 \end{matrix}$$

RN 20721-50-0 HCAPLUS

CN Ethanol, 2,2'-[[4-[(4-aminophenyl)azo]phenyl]imino]bis- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{HO-CH}_2\text{-CH}_2\text{-N} \\ \text{HO-CH}_2\text{-CH}_2\end{array}$$

RN 22036-97-1 HCAPLUS

CN 1-Naphthalenesulfonic acid, 4-hydroxy-3-[(2-methoxyphenyl)azo]- (9CI) (CA INDEX NAME)

RN 26381-41-9 HCAPLUS
CN 2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● C1-

RN 26590-05-6 HCAPLUS
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \mid \\ \mid \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \stackrel{+}{-} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \mid \\ \text{Me} \end{array}$$

• c1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

$$\begin{matrix} \text{O} \\ || \\ \text{H}_2\text{N}-\text{C}-\text{CH} \longrightarrow \text{CH}_2 \end{matrix}$$

RN 68391-30-0 HCAPLUS

CN 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

• c1-

RN 69418-26-4 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 44992-01-0

CMF C8 H16 N O2 . Cl

$$\begin{array}{c} \text{O} \\ || \\ \text{Me}_{3}\text{+N-CH}_{2}\text{-CH}_{2}\text{-O-C-CH} = \text{CH}_{2} \end{array}$$

• c1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

$$\begin{matrix} \text{O} \\ || \\ \text{H}_2\text{N}-\text{C}-\text{CH} = \text{CH}_2 \end{matrix}$$

RN 74153-51-8 HCAPLUS

CN Benzenemethanaminium, N, N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 46830-22-2 CMF C14 H20 N O2 . C1

● Cl-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 108388-79-0 HCAPLUS

CN Benzenemethanaminium, N, N-dimethyl-N-[2-[(1-oxo-2-propenyl)oxy]ethyl]-, chloride, polymer with 2-propenamide and N, N, N-trimethyl-2-[(1-oxo-2-propenyl)oxy]ethanaminium chloride (9CI) (CA INDEX NAME)

CM 1

CRN 46830-22-2 CMF C14 H20 N O2 . C1

$$\begin{array}{c|c} \text{Me} & \text{O} \\ | & \text{H} \\ \text{Ph-CH}_2 - \text{N} \\ | & \text{CH}_2 - \text{CH}_2 - \text{O-C-CH} \\ \text{Me} \end{array}$$

● c1-

CM 2

CRN 44992-01-0 CMF C8 H16 N O2 . Cl

$$\begin{array}{c} {\rm O} \\ || \\ {\rm Me}_3{}^+{\rm N}-{\rm CH}_2{}^-{\rm CH}_2{}^-{\rm O}-{\rm C}{}^-{\rm CH} = {\rm CH}_2{}^-{\rm CH}_2{}^-$$

● c1-

CM 3

CRN 79-06-1 CMF C3 H5 N O

$$\begin{matrix} \text{O} \\ || \\ \text{H}_2\text{N-C-CH-----} \text{CH}_2 \end{matrix}$$

RN 176742-32-8 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminonitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

 $D1 - NO_2$

```
L21 ANSWER 3 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     2004:510121 HCAPLUS
DN
     141:59180
ED
     Entered STN: 24 Jun 2004
     Use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivatives in hair
TТ
     dyeing compositions
ΙN
     Hoeffkes, Horst; Seiler, Martina; Cortekar, Birgitta
PΑ
     Henkel Kommanditgesellschaft Auf Aktien, Germany
SO
     Eur. Pat. Appl., 33 pp.
     CODEN: EPXXDW
DT
     Patent
LA
     German
IC
     ICM A61K007-13
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                                            APPLICATION NO.
                         KIND
                                DATE
                                                                   DATE
     -----
                         ____
                                            -----
PΤ
     EP 1430874
                         A2
                                20040623
                                           EP 2003-28615
                                                                   20031211
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     DE 10259849
                         Α1
                                20040708
                                            DE 2002-10259849
                                                                 20021220
PRAI DE 2002-10259849
                          Α
                                20021220
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 EP 1430874 ICM A61K007-13
     The invention concerns hair dyes that contain 4-N,N-
     Bis(monohydroxyalkyl)amino-3-nitrophenol derivs., especially
     4-N, N-Bis(2-hydroxypropyl)amino-3-nitrophenol. The compns. further can contain direct dyes, surfactants, amino acids, oligopeptides, amines,
     N-containing heterocycles and aromatic hydroxyl compds. Thus a formulation
     included (weight/weight%): Texapon NSO 15.0; Lorol 5.0; Polychol 5 1.2; Dow
     Corning 345EU 0.1; Mirapol Al5; Lipoxol 400 MED 5.0; Luviskol K30 0.5;
     sodium hydrogen carbonate 0.5; Nutrilan Keratin W 0.3;
     4-N, N-Bis(2-hydroxypropyl)amino-3-nitrophenol 0,4; Violet 1.4 D 0.2; Rodol
    9R Base 0.2; HC Red 3 0.4; perfume 0.3; water to 96; propellant 4.0,.
    direct hair dye bis hydroxypropylamino nitrophenol
ST
```

```
TΤ
      Alcohols, biological studies
      RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (C12-18; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs.
         in hair dyeing compns.)
 ΙT
      Alcohols, biological studies
      RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (C16-18, ethoxylated; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-
         nitrophenol derivs. in hair dyeing compns.)
ΙT
      Alcohols, biological studies
      RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (C16-18; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs.
         in hair dyeing compns.)
      Surfactants
         (amphoteric; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol
         derivs. in hair dyeing compns.)
IT
      Surfactants
         (anionic; use of 4-N, N-Bis (monohydroxyalkyl) amino-3-nitrophenol derivs.
         in hair dyeing compns.)
ΙT
     Surfactants
         (cationic; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol
        derivs. in hair dyeing compns.)
ΙT
     Dyes
         (direct; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs.
        in hair dyeing compns.)
ΙT
     Hair preparations
         (dyes; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs. in
        hair dyeing compns.)
ΙT
     Castor oil
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (ethoxylated; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol
        derivs. in hair dyeing compns.)
IΤ
     Keratins
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hydrolyzates; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol
        derivs. in hair dyeing compns.)
     Alcohols, biological studies
IT
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (lanolin, ethoxylated; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-
        nitrophenol derivs. in hair dyeing compns.)
TΤ
     Surfactants
        (nonionic; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol
        derivs. in hair dyeing compns.)
ΙT
     Peptides, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (oligopeptides; use of 4-N, N-Bis (monohydroxyalkyl) amino-3-nitrophenol
        derivs. in hair dyeing compns.)
ΙT
        (powdered, Silkall 100; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-
        nitrophenol derivs. in hair dyeing compns.)
IT
     Amino acids, biological studies
     Phenols, biological studies
     Polyoxyalkylenes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs. in hair
        dyeing compns.)
IT
     Protein hydrolyzates
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (wheat; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs.
        in hair dyeing compns.)
```

IT Surfactants (zwitterionic; use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs. in hair dyeing compns.) IT 541-02-6, Dow Corning 345EU RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (Dow Corning 345EU; use of 4-N, N-Bis(monohydroxyalkyl)amino-3nitrophenol derivs. in hair dyeing compns.) IT112-02-7, Dehyquart A 124-68-5, AMP 95 610-81-1D, 4-Amino-3nitrophenol, N,N-Bis(monohydroxyalkyl) derivs. 632-99-5, Basic Violet 14 633-96-5, Acid Orange 7 1064-48-8, Acid Black 1 2390-60-5, Basic Blue 7 2784-89-6, HC red 1 2871-01-4, HC Red 3 3520-42-1, Acid Red 52 **3567-66-6**, Acid Red 33 4430-18-6, Acid Violet 43 4926-55-0, HC yellow 2 6358-09-4, Rodol 9R Base 9004-82-4, Texapon NSO 12270-25-6, Basic Red 51 25322-68-3, Lipoxol 400MED 26062-79-3, Merquat 100 **26381-41-9**, Basic Brown 16 32208-04-1, Dehyquart F75 33229-34-4, HC blue 2 33939-64-9, Akypo RLM 45N **53694-17-0**, Merquat 280 53988-60-6, Aminoxid WS 35 54381-08-7, HC orange 1 56932-44-6, HC yellow 5 61901-61-9, Basic Orange 31 63451-27-4, Mirapol A15 68123-13-7, Basic Blue 99 **68391-30-0**, Basic Red 76 68391-31-1, Basic Yellow 57 83138-08-3, Dehyton K 84041-77-0 92952-81-3, HC red BN 103300-27-2, Aminol A15 116844-55-4, Basic Yellow 87 176742-32-8, Basic Brown 17 625836-51-3 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (use of 4-N, N-Bis(monohydroxyalkyl)amino-3-nitrophenol derivs. in hair dyeing compns.) 633-96-5, Acid Orange 7 1064-48-8, Acid Black 1 TΤ **3567-66-6**, Acid Red 33 **26381-41-9**, Basic Brown 16 **53694-17-0**, Merquat 280 **68391-30-0**, Basic Red 76 176742-32-8, Basic Brown 17 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (use of 4-N, N-Bis (monohydroxyalkyl) amino-3-nitrophenol derivs. in hair dyeing compns.) RN 633-96-5 HCAPLUS CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

● Na

ELHILO 09/663942 8/20/04 Page 18

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

$$Ph-N=N$$
 $N=N$
 $N=N$
 NO_2

●2 Na

RN 3567-66-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-amino-4-hydroxy-3-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 26381-41-9 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

• c1-

RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \downarrow_{+} \\ \text{H}_{2}\text{C} &= \text{CH} - \text{CH}_{2} - \text{N} \\ \downarrow \\ \text{Me} \end{array}$$

● Cl-

CM 2

CRN 79-10-7 CMF C3 H4 O2

RN 68391-30-0 HCAPLUS

CN 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl -

RN 176742-32-8 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminonitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

D1-NO2

2004:250648 HCAPLUS

ΑN

```
140:275728
DN
ED
     Entered STN: 26 Mar 2004
ΤI
     Temporary hair dye compositions containing anionic polymers
ΙN
     Massoni, Jack
PA
     USA
SO
     U.S. Pat. Appl. Publ., 5 pp.
     CODEN: USXXCO
DT
     Patent
LA
     English
     ICM A61K007-13
IC
     008405000
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                           KIND
                                  DATE
                                              APPLICATION NO.
                                                                        DATE
                           ____
                                  -----
PΙ
     US 2004055094
                           A1
                                  20040325
                                               US 2002-244275
                                                                        20020916
                                             WO 2003-US25672
     WO 2004024829
                           A1
                                  20040325
                                                                       20030818
            PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG,
              KZ, MD, RU, TJ
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
              CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
              GW, ML, MR, NE, SN, TD, TG
PRAI US 2002-244275
                           Α
                                  20020916
CLASS
 PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
```

ANSWER 4 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

```
US 2004055094
                 ICM
                         A61K007-13
                  NCL
                         008405000
AΒ
     A temporary hair dyeing composition which comprises: a cationic dye, a
     water-soluble anionic polymer, an alkaline agent., and water. Thus, a
     formulation contained water 92.680, Ultrez 10 1.000, methyl- and
     propylparaben 0.500, fragrance 0.200, Steareth 21 0.050, ethoxydiglycol
     5.000, Basic Brown 17 0.050, Basic Red 57 0.010, Basic Yellow 57 0.010,
     and ethanolamine 0.500%.
ST
     hair dye anionic polymer
IT
     Polyelectrolytes
         (anionic; temporary hair dye compns. containing anionic polymers)
ΙT
         (cationic; temporary hair dye compns. containing anionic polymers)
IΤ
     Hair preparations
         (dyes; temporary hair dye compns. containing anionic polymers)
ΙT
     Surfactants
        (temporary hair dye compns. containing anionic polymers)
ΙT
     Polymers, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (water-soluble; temporary hair dye compns. containing anionic polymers)
ΙT
     79-10-7D, Acrylic acid, esters, polymers 7748-27-8D, Vinyl
     isodecanoate, polymers with vinyl compds.
                                                 9002-92-0, Laureth
     9005-00-9, Steareth
                           9005-38-3, Sodium alginate
                                                         9005-64-5, Polysorbate
          12270-25-6, Basic Red 51 25014-41-9D,
     Polyacrylonitrile, hydrolyzed, compds. with triethanolamine
     26381-41-9, Basic Brown 16
                                  50856-24-1D, polymers with vinyl
     compds.
               50858-60-1D, polymers with vinyl compds.
     Polyethylene glycol stearyl ether methacrylate, polymers with
     vinyl compds.
                     61901-61-9, Basic Orange 31 65930-07-6,
     Acrylonitrile-starch copolymer sodium salt 68025-34-3,
     Acrylonitrile-starch copolymer potassium salt 68123-13-7, Basic
     Blue 99 68391-30-0, Basic Red 76
                                        68391-31-1, Basic Yellow 57
     75819-41-9D, polymers with vinyl compds.
                                               102516-09-6D, polymers with
     vinyl compds. 116464-11-0D, polymers with vinyl compds.
     116844-55-4, Basic Yellow 87 176742-32-8, Basic Brown 17
     195739-91-4, Ultrez 10
                             250241-42-0D, polymers with vinyl compds.
     674304-22-4, Sodium acrylate-vinyl isodecanoate
     copolymer
               674305-80-7, Basic Red 57
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (temporary hair dye compns. containing anionic
        polymers)
IT
     102-71-6, Triethanolamine, processes
                                            124-68-5
                                                       141-43-5, Ethanolamine,
               1310-73-2, Sodium hydroxide, processes
     processes
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); PROC (Process)
        (temporary hair dye compns. containing anionic polymers)
IΤ
     25014-41-9D, Polyacrylonitrile, hydrolyzed, compds. with
     triethanolamine 26381-41-9, Basic Brown 16 65930-07-6,
     Acrylonitrile-starch copolymer sodium salt 68025-34-3,
     Acrylonitrile-starch copolymer potassium salt 68391-30-0
     , Basic Red 76 116464-11-OD, polymers with vinyl compds.
     176742-32-8, Basic Brown 17 674304-22-4, Sodium
     acrylate-vinyl isodecanoate copolymer
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (temporary hair dye compns. containing anionic
        polymers)
RN
     25014-41-9 HCAPLUS
CN
     2-Propenenitrile, homopolymer (9CI) (CA INDEX NAME)
```

CM 1

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

RN 26381-41-9 HCAPLUS
CN 2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl-

RN 65930-07-6 HCAPLUS

CN Starch, polymer with 2-propenenitrile, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 37291-07-9

CMF (C3 H3 N . Unspecified) x

CCI PMS

CM 2

CRN 9005-25-8

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 107-13-1

CMF C3 H3 N

RN 68025-34-3 HCAPLUS

CN Starch, polymer with 2-propenenitrile, potassium salt (9CI) (CA INDEX NAME)

CM 1

CRN 37291-07-9

CMF (C3 H3 N . Unspecified)x

CCI PMS

CM 2

CRN 9005-25-8

CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 3

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

RN 68391-30-0 HCAPLUS

CN 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

• c1-

RN 116464-11-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -(3-carboxymethylene-1-oxopropyl)- ω -(hexadecyloxy)- (9CI) (CA INDEX NAME)

CM 1

CRN 9004-95-9

CMF (C2 H4 O)n C16 H34 O

CCI PMS

$$HO \longrightarrow CH_2 - CH_2 - O \longrightarrow n$$
 (CH₂)₁₅ - Me

CM 2

CRN 97-65-4 CMF C5 H6 O4

CHO

$$\begin{array}{c} {\rm CH_2} \\ || \\ {\rm HO_2C-C-CH_2-CO_2H} \end{array}$$

RN 176742-32-8 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminonitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

 $D1-NO_2$

RN 674304-22-4 HCAPLUS

CN Isodecanoic acid, ethenyl ester, polymer with sodium 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7748-27-8

CMF C12 H22 O2

CCI IDS

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{(iso-C9H}_{19}\text{)} - \text{C-O-CH----} \text{CH}_2 \end{array}$$

CM 2

CRN 7446-81-3 CMF C3 H4 O2 . Na

Na

```
2003:945388 HCAPLUS
ΑN
DN
     140:8444
ED
     Entered STN: 04 Dec 2003
     Hair dye compositions containing amino silicones, glycol ethers, and
     water-soluble polymers
IN
     Tsukahara, Yoshiyo
PΑ
     Nikko Chemicals Co., Ltd., Japan; Nihon Surfactants Industry Co., Ltd.;
     Cosmo Technical Center Co., Ltd.
SO
     Jpn. Kokai Tokkyo Koho, 7 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM A61K007-13
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                       KIND
                              DATE
                                        APPLICATION NO.
                        ____
                               -----
                                          ______
     JP 2003342137
                       A2
                               20031203
                                          JP 2002-155139
                                                                20020529
PRAI JP 2002-155139
                               20020529
CLASS
PATENT NO.
               CLASS PATENT FAMILY CLASSIFICATION CODES
 -----
JP 2003342137 ICM A61K007-13

AB The compns., which show little hair damaging, scalp dyeing, good
    hair-conditioning effect, and color fastness, contain amino-modified
    silicones, disperse dyes and/or basic dyes, glycol ethers, and water-soluble
    polymers. A hair dye was prepared from HC Orange 1 0.5, Disperse Blue 3
    0.5, KF 8018 1.5, SM 8702C 4.0, Et carbitol 5.0, EtOH 5.0, hydroxyethyl
    cellulose 2.0, and H2O to 100 weight%.
    hair dye amino silicone glycol ether; water soluble polymer hair dye amino
ST
    silicone; hydroxyethyl cellulose hair dye amino silicone
ΙT
    Polysiloxanes, biological studies
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
       (amino-containing, KF 8018, SF 8451C; hair dyes containing amino silicones,
       glycol ethers, and water-soluble polymers)
```

L21 ANSWER 5 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

```
IT
     Dyes
         (basic; hair dyes containing amino silicones, glycol ethers, and
water-soluble
        polymers)
     Vinyl compounds, biological studies
IΤ
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (carboxy-containing, polymers; hair dyes containing amino silicones, glycol
        ethers, and water-soluble polymers)
ТТ
     Hair preparations
        (dyes; hair dyes containing amino silicones, glycol ethers, and
water-soluble
        polymers)
ΙT
     Glycols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (ethers; hair dyes containing amino silicones, glycol ethers, and
        water-soluble polymers)
ΙT
     Ethers, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (glycol; hair dyes containing amino silicones, glycol ethers, and
        water-soluble polymers)
IT
     Disperse dyes
     Human
        (hair dyes containing amino silicones, glycol ethers, and water-soluble
        polymers)
ΙT
     Polymers, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (water-soluble; hair dyes containing amino silicones, glycol ethers, and
        water-soluble polymers)
ΙT
     111-90-0, Ethylcarbitol
                              2475-46-9, Disperse Blue 3
                                                             2871-01-4, HC Red 3
     4926-55-0, HC Yellow 2
                              9004-62-0, Hydroxyethyl cellulose
     Polyoxyethylene cetyl ether
                                  9004-98-2, Polyoxyethylene oleyl ether
     25086-89-9, Vinyl acetate-vinylpyrrolidone copolymer 26381-41-9,
                     26403-74-7 30581-59-0, N,N-Dimethylaminoethyl
     Basic Brown 16
     methacrylate-vinylpyrrolidone copolymer 54381-08-7, HC Orange 1
     143711-48-2, SM 8702C 353506-28-2, C.I. Basic Blue 2
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dyes containing amino silicones, glycol ethers,
        and water-soluble polymers)
     26381-41-9, Basic Brown 16 30581-59-0,
IT
     N, N-Dimethylaminoethyl methacrylate-vinylpyrrolidone copolymer
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dyes containing amino silicones, glycol ethers,
        and water-soluble polymers)
RN
     26381-41-9 HCAPLUS
     2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-,
CN
```

chloride (9CI) (CA INDEX NAME)

● cl-

RN 30581-59-0 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

CM 2

CRN 88-12-0 CMF C6 H9 N O

L21 ANSWER 6 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:685980 HCAPLUS

DN 139:218936

ED Entered STN: 03 Sep 2003

TI Hair-dyeing and -styling preparations IN Sugimoto, Kenichi; Shinkai, Masakazu

PA Kanebo, Ltd., Japan

```
SO
     Jpn. Kokai Tokkyo Koho, 10 pp.
     CODEN: JKXXAF
 DT
     Patent
LA
     Japanese
 IC
     ICM A61K007-13
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
                       KIND DATE
     PATENT NO.
                                           APPLICATION NO. DATE
     JP 2003246714
                                                                 -----
                                           ------
PΤ
                        A2 20030902 JP 2002-45812
                                                            20020222
PRAI JP 2002-45812
                              20020222
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 ______
 JP 2003246714 ICM A61K007-13
     Hair prepns. contain basic dyes and amphoteric polymers. A foam composition
     containing 95 weight% raw liquid containing Basic Brown 16 0.1, Yukaformer SM
(N-
     methacryloyloxyethyl-N, N-dimethylammonium-\alpha-N-carboxybetaine-
       methacrylate copolymer) 3.0, C black 0.1, EtOH 10.0,
     polyoxyethylene hydrogenated castor oil 0.5, polyoxyethylene lauryl ether
     0.5, and H2O to 100 weight% and 5 weight% liquefied petroleum gas showed gray
     hair-dyeing and hair-styling effects and did not stain the skin.
     hair styling basic dye amphoteric polymer
ST
ΤТ
        (basic; hair-dyeing and -styling prepns. containing basic dyes and
        amphoteric polymers)
ΙT
     Hair preparations
        (dyes, styling; hair-dyeing and -styling prepns. containing basic dyes and
        amphoteric polymers)
ΙT
     Human
     Pigments, nonbiological
        (hair-dyeing and -styling prepns. containing basic dyes and amphoteric
        polymers)
TΤ
     Carbon black, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair-dyeing and -styling prepns. containing basic dyes and amphoteric
IT
     Quaternary ammonium compounds, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (polymers; hair-dyeing and -styling prepns. containing basic dyes and
        amphoteric polymers)
     79-41-4D, Methacrylic acid, esters, polymers with N-
ΙT
     methacryloyloxyethyl-N, N-dimethylammonium-\alpha, N-
    methylcarboxybetaine 5281-04-9, Japan Red 202 6448-95-9
     , Japan Red 404 12227-89-3, Black iron oxide 25136-75-8,
    Merquat 3330 26381-41-9, Basic Brown 16 53694-17-0,
    Merquat 295 62723-61-9D, polymers with methacrylates
     68123-13-7, Basic Blue 99 68391-30-0, Basic Red 76 68391-31-1,
    Basic Yellow 57 70801-07-9, Amphomer 28-4910 136372-47-9
     , Yukaformer AM 75 150104-73-7, Yukaformer SM 176742-32-8,
    Basic Brown 17 187620-28-6, Yukaformer 301
                                                190976-47-7, Yukaformer W
    314021-15-3, Yukaformer 205 357330-69-9, Yukaformer RFN
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair-dyeing and -styling prepns. containing basic
       dyes and amphoteric polymers)
    5281-04-9, Japan Red 202 6448-95-9, Japan Red 404
ΙT
    25136-75-8, Merquat 3330 26381-41-9, Basic Brown 16
    53694-17-0, Merquat 295 68391-30-0, Basic Red 76
```

• Ca

RN 6448-95-9 HCAPLUS
CN 2-Naphthalenecarboxamide, 3-hydroxy-4-[(2-methyl-5-nitrophenyl)azo]-N-phenyl- (9CI) (CA INDEX NAME)

RN 25136-75-8 HCAPLUS
CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \mid \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \mid \\ \text{Me} \end{array}$$

• c1-

CM 2

CRN 79-10-7 CMF C3 H4 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{HO-C-CH----} \text{CH}_2 \end{array}$$

CM 3

CRN 79-06-1 CMF C3 H5 N O

RN 26381-41-9 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● C1-

RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● c1-

CM 2

CRN 79-10-7 CMF C3 H4 O2

RN 68391-30-0 HCAPLUS

CN 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● c1-

RN 70801-07-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[(1,1-dimethylethyl)amino]ethyl ester, polymer with methyl 2-methyl-2-propenoate, 1,2-propanediol mono(2-methyl-2-propenoate), 2-propenoic acid and N-(1,1,3,3-tetramethylbutyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 4223-03-4 CMF C11 H21 N O

$$\begin{array}{c} \text{O} \\ || \\ \text{NH-C-CH} \\ | \\ \text{Me-C-CH}_2 - \text{CMe}_3 \\ | \\ \text{Me} \end{array}$$

CM 2

CRN 3775-90-4 CMF C10 H19 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ & || & || \\ \text{t-BuNH-CH}_2\text{--CH}_2\text{--O-C-C-Me} \end{array}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 27813-02-1 CMF C7 H12 O3

CCI IDS

CM 6

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me-C-CO}_2 \text{H} \end{array}$$

CM 7

CRN 57-55-6 CMF C3 H8 O2

$$^{\mathrm{OH}}_{\mid}^{\mid}_{\mathrm{H_3C-CH-CH_2-OH}}$$

RN 136372-47-9 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 62723-61-9 CMF C10 H17 N O4

CM 2

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

RN 176742-32-8 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminonitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl, chloride (9CI) (CA INDEX NAME)

 $D1 - NO_2$

L21 ANSWER 7 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:610217 HCAPLUS

DN 139:138357

ED Entered STN: 08 Aug 2003

TI Hair dyes containing acyl sulfonate surfactants and aliphatic alcohols

IN Yoshida, Katsunori; Inoue, Haruhiko; Kinoshita, Koichi; Ochiai, Masatoshi; Hashimoto, Katsuo; Nakama, Yasunari

PA Shiseido Company, Ltd., Japan

SO PCT Int. Appl., 30 pp. CODEN: PIXXD2

DT Patent

LA Japanese

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

```
FAN.CNT 1
      PATENT NO.
                        KIND DATE
                                           APPLICATION NO.
                                                                    DATE
      _____
                        ----
                      A1 20030807 WO 2002-JP586
     WO 2003063812
                                                                    20020128
        W: KR, US
PRAI WO 2002-JP586
                                20020128
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 ______
 WO 2003063812 ICM A61K007-13
   A hair dye preparation contains (A) 0.1 to 10.0 weight% specific anionic
     surfactant of the long-chain acylsulfonic acid salt type, (B) 0.25 to 25.0
     weight% aliphatic alc., and (C) an acid dye and/or natural pigment. This hair
     dye preparation is stable even in a strongly acidic region (pH, 1.5 to 4.5)
     where it shows a dyeing effect. It has a moderate viscosity and gives a
     good use feeling. Furthermore, removal of the preparation after use does not
     require much labor. For example, a hair dye (pH 2.5) contained Japan
     Black 401 0.2, Japan Purple 401 0.3, Japan Yellow 4 0.1, benzyl alc. 5,
     N-lauroyltaurine sodium 2, stearyl alc. 5, xanthan gum 1.5, Na
     polyacrylate 0.2, 1,3-butylene glycol 10, collagen hydrolyzates
     0.2, citric acid 0.4, perfumes q.s., and ion-exchanged water balance to
     100 %.
ST
     hair dye sulfonate surfactant aliph alc; lauroyltaurine stearol acidic
     hair dye
IΤ
     Alcohols, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (C16-18; hair dyes containing acyl sulfonate surfactants and aliphatic alcs.
        for improved stability)
ΙT
     Hair preparations
        (dyes; hair dyes containing acyl sulfonate surfactants and aliphatic alcs.
for
        improved stability)
     107-36-8D, Isethionic acid, cocoyl derivs., sodium salts
IT
                                                                112 - 92 - 5,
     Stearyl alcohol 149-39-3, N-Stearoyl-N-methyltaurine sodium salt
     661-19-8, Behenyl alcohol 1064-48-8, Japan black 401
     1934-21-0, Japan yellow 4 4430-18-6, Japan purple 401
     6148-77-2, N-Palmitoyltaurine sodium salt 29703-73-9, Sodium stearoyl
     isethionate 36653-82-4, Cetyl alcohol 70609-66-4, N-Lauroyltaurine sodium salt 71316-64-8, N-Myristoyltaurine sodium salt
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dyes containing acyl sulfonate surfactants and
        aliphatic alcs. for improved stability)
             THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT
(1) Lg Chemical Co Ltd; KR 123072 B1 1997 HCAPLUS
(2) San-Ei Chemical Industries Ltd; JP 2001213737 A 2001 HCAPLUS
(3) San-Ei Chemical Industries Ltd; JP 2001213738 A 2001 HCAPLUS(4) San-Ei Chemical Industries Ltd; JP 2001213739 A 2001 HCAPLUS
(5) San-Ei Chemical Industries Ltd; JP 200189335 A 2001
(6) San-Ei Chemical Industries Ltd; JP 20023344 A 2001
     1064-48-8, Japan black 401 1934-21-0, Japan yellow 4
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dyes containing acyl sulfonate surfactants and
        aliphatic alcs. for improved stability)
RN
     1064-48-8 HCAPLUS
CN
     2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-
     (phenylazo)-, disodium salt (9CI) (CA INDEX NAME)
```

2 Na

1934-21-0 HCAPLUS RN

1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-CN sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

L21 ANSWER 8 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

2003:424452 HCAPLUS ΑN

DN 138:406586

ED Entered STN: 03 Jun 2003

TΙ Acidic hair dye bases containing polymers

IN Takahashi, Masanobu; Ota, Toshio; Iketa, Hiroyuki

PΑ Sanei Kagaku Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 17 pp. SO CODEN: JKXXAF

DT Patent

LAJapanese

IC ICM A61K007-13

62-3 (Essential Oils and Cosmetics) CC

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003160452 PRAI JP 2001-402139 CLASS	A2	20030603 20011126	JP 2001-402139	20011126

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

JP 2003160452 ICM A61K007-13

This invention relates to acidic hair dyes which show good adhesion to the hair, enough viscosity not to droop, and excellent combability. The hair dyes comprise acrylic acid-alkyl methacrylate copolymers, carboxyvinyl polymers, isopropanol, acidic dyes, and water. For example, a hair dye contained Pemulen TR-2 1.3, Carbopol 940 2, isopropanol 25, Japan Orange 205 0.3, Japan Violet 401 0.2, Japan Black 401 0.1, tartaric acid 1.5, KOH 0.7, myristyl alc. 1, benzyl alc. 7, dipropylene glycol 5, methylphenylpolysiloxane 0.5, disodium edetate 0.01, and water balance to 100 %.

ST acidic hair dye acrylate carboxyvinyl polymer

IT Vinyl compounds, biological studies
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(carboxy-containing, polymers; acidic hair dye bases containing carboxyvinyl polymers)

IT Hair preparations

(dyes; acidic hair dye bases containing carboxyvinyl polymers)
67-63-0, Isopropanol, biological studies 632-68-8, Japan red 105
633-96-5, Japan orange 205 846-70-8 1064-48-8, Japan black 401 2611-82-7, Japan red 102 3844-45-9, Japan blue 1 4430-18-6, Japan violet 401 6358-69-6, Japan green 204 76050-42-5, Carbopol 940 89286-85-1, Hiviswako 104 96827-24-6, Carbopol 1342 145687-02-1, Pemulen TR-2 176429-87-1, Carbopol ETd 2020 192006-73-8, Aqupec HV 505
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (acidic hair dye bases containing carboxyvinyl

IT 633-96-5, Japan orange 205 1064-48-8, Japan black 401
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(acidic hair dye bases containing carboxyvinyl polymers)

RN 633-96-5 HCAPLUS

polymers)

CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

● Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

L21 ANSWER 9 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:274688 HCAPLUS

DN 138:275945

ED Entered STN: 09 Apr 2003

TI Containers for hair preparations containing basic dyes and hair products packed in the containers

IN Shirai, Takayuki; Sakura, Masaaki

PA Hoyu Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 7 pp. CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM B65D065-40

ICS A45D034-00; A45D034-02; A61K007-13; B32B001-02

CC 62-3 (Essential Oils and Cosmetics)
Section cross-reference(s): 38

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2003104434 PRAI JP 2001-301312	A2	20030409 20010928	JP 2001-301312	20010928

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

JP 2003104434 ICM B65D065-40

ICS A45D034-00; A45D034-02; A61K007-13; B32B001-02

The container to hold hair prepns. containing basic dyes has a basic dye-barrier layer, e.g. made of polymers such as polyethylene terephthalate or polyacrylonitrile which have low permeability to basic dyes or made of inorg. substances such as SiO2, Al2O3, diamond-like C, etc. The container is free from coloration due to adsorption of the basic dyes and prevents reduction in dyeing power during storage. A PET bottle which had basic dye-barrier property was packed with a hair dye composition containing BASIC BLUE 3 0.3, hydroxyethyl cellulose 2.0, xanthan gum 0.3, EtOH 10, BASIC RED 76 0.05, BASIC BROWN 17 0.05%, and H2O balance.

ST hair dye product basic die barrier container; PET bottle basic dye barrier hair prepn

IT Containers

(basic dye-containing hair prepns. packed in containers having basic dye-barrier layer)

IT Polyesters, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (basic dye-containing hair prepns. packed in containers having basic dye-barrier layer) ΙT Dyes (basic; basic dye-containing hair prepns. packed in containers having basic dye-barrier layer) IT Dves (cationic; basic dye-containing hair prepns. packed in containers having basic dye-barrier layer) IΤ Hair preparations (dyes; basic dye-containing hair prepns. packed in containers having basic dye-barrier layer) 1344-28-1, Alumina, biological studies IT7429-90-5, Aluminum, biological 7631-86-9, Silica, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (basic dye-barrier layer; basic dye-containing hair prepns. packed in containers having basic dye-barrier layer) IT 25014-41-9, Polyacrylonitrile 25038-59-9, Poly(ethylene terephthalate), biological studies 55840-82-9, BASIC BLUE 3 **68391-30-0**, BASIC RED 76 **176742-32-8**, BASIC BROWN 17 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (basic dye-containing hair prepns. packed in containers having basic **dye**-barrier layer) IT 7440-44-0, Diamond-like carbon, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (diamond-like, basic dye-barrier layer; basic dye-containing hair prepns. packed in containers having basic dye-barrier layer) ΙT 25014-41-9, Polyacrylonitrile 68391-30-0, BASIC RED 76 176742-32-8, BASIC BROWN 17 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (basic dye-containing hair prepns. packed in containers having basic **dye-**barrier layer) 25014-41-9 HCAPLUS RN CN 2-Propenenitrile, homopolymer (9CI) (CA INDEX NAME) CM CRN 107-13-1 CMF C3 H3 N

$H_2C = CH - C = N$

RN 68391-30-0 HCAPLUS
CN 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● C1-

RN 176742-32-8 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminonitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl, chloride (9CI) (CA INDEX NAME)

 ${\tt D1-NO_2}$

L21 ANSWER 10 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:35290 HCAPLUS

DN 138:95211

ED Entered STN: 15 Jan 2003

TI Hair coloring composition and method

IN Pollack, George

PA Hair Marker LLC, USA

SO U.S., 6 pp., Cont.-in-part of U.S. Ser. No. 568,830. CODEN: USXXAM

DT Patent

LA English

IC ICM A61K007-13

NCL 424070600; 424070100; 424401000; 424400000

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CC
      62-3 (Essential Oils and Cosmetics)
 FAN.CNT 2
      PATENT NO.
                        KIND
                         KIND DATE APPLICATION NO. DATE
 PΙ
      US 6506374
                     B1
A1
                                 20030114 US 2000-675838
                                 20020116 EP 2001-111544
                                                                     20000929
      EP 1172081
                                                                     20010511
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
 JP 2002114654 A2 20020416
BR 2001002937 A 20040525
PRAI US 2000-568830 A2 20000511
US 2000-675838 A 20000929
                                             JP 2001-145404
                                                                     20010515
                                             BR 2001-2937
                                                                   20010717
 CLASS
  PATENT NO.
               CLASS PATENT FAMILY CLASSIFICATION CODES
   US 6506374 ICM A61K007-13
                 NCL
                        424070600; 424070100; 424401000; 424400000
 US 6506374
                 ECLA A61K007/13
     A hair coloring composition with a controlled viscosity to be reasonably free
      flowing yet not drip or cause build-up on the hair comprises a cationic
     direct dye or washable color in a liquid vehicle and a polymeric ruboff
     protector, e.g., a copolymer of vinyl pyrrolidone and vinyl acetate
      (PVP/VA). The dye or color is capable of directly applying color to hair
     without oxidation and at an alkaline pH and with controlled vapor pressure to
     have a predetd. rate of evaporation For example, a specific formula for a very
     dark brown shade was given containing: Phase A - water 42.0%, PVP/VA (E 635)
     2.00%, Crotein hydrotriticum 0.2%, and dimethicone copolyol DC 193 0.1%;
     Phase B - water 33.0%, Arianor Steel Blue 1.2%, Arianor Madder Red 0.3%,
     Arianor Straw Yellow 0.6%, Arianor Mahogany Brown 0.2%, and Arianor Sienna
     Brown 0.2%; Phase C - ethanol 20.0%; Phase D - triethanolamine as needed
     for pH = 8.0-8.5; and Phase E - Belmay perfume Silk 0.1%.
ST
     direct dye polymer ruboff protector hair coloring
ΙT
     Hair preparations
        (dyes, cationic, direct; hair coloring composition containing cationic
direct
        dye and polymeric ruboff protector)
ΙT
     Polymers, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (ruboff shields; hair coloring composition containing cationic direct dye
and
        polymeric ruboff protector)
     64-17-5, Ethyl alcohol, biological studies 67-63-0, Isopropyl alcohol,
IT
     biological studies 75-65-0, tert-Butyl alcohol, biological studies 78-92-2, 2-Butanol 477-73-6, Lowacryl Red 2 632-99-5, Lowacryl Violet 14 2390-59-2, Lowacryl Violet 4
     25086-89-9, Vinyl acetate-vinylpyrrolidone copolymer 26381-41-9,
     Arianor Mahogany 68123-13-7, Arianor Steel Blue 68391-30-0,
     Arianor Madder Red 68391-31-1, Arianor Straw Yellow 176742-32-8
     , Arianor Sienna Brown 226940-14-3, Arianor Orange
     389132-49-4, Arianor Crazy Gold 389132-51-8, Arianor Flame Red
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair coloring composition containing cationic direct dye
        and polymeric ruboff protector)
RE.CNT
              THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Anon; DE 3246747 A 1984 HCAPLUS
(2) Anon; JP 62164612 A 1987 HCAPLUS
(3) Anon; WO 9744002 1997 HCAPLUS
(4) Braun; US 5409502 A 1995 HCAPLUS
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- (5) Grit; US 5948124 A 1999 HCAPLUS
- (6) Hickling; US 20010003851 A1 2001
- (7) Kalopissis; US 3884625 A 1975 HCAPLUS
- (8) Sobel; US 5964226 A 1999
- IT 26381-41-9, Arianor Mahogany 68391-30-0, Arianor Madder
 Red 176742-32-8, Arianor Sienna Brown 226940-14-3,
 Arianor Orange
 - RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair coloring composition containing cationic direct dye and polymeric ruboff protector)
- RN 26381-41-9 HCAPLUS
- CN 2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● c1-

- RN 68391-30-0 HCAPLUS
- CN 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

RN 176742-32-8 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminonitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

D1-NO2

RN 226940-14-3 HCAPLUS

CN Benzenaminium, 3-[(4-amino-2,5-dimethoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

$$N=N$$

OMe

N=N

N+Me3

• c1-

L21 ANSWER 11 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:964897 HCAPLUS

DN 138:28939

ED Entered STN: 20 Dec 2002

TI Hair relaxer and straightening compositions containing cationic dyes and emollients

IN Patel, Manilal; Nava, Melissa

PA USA

SO U.S. Pat. Appl. Publ., 6 pp. CODEN: USXXCO

DT Patent

LA English

IC ICM A61K007-09

ICS A61K007-13 NCL 424070200; 008426000 CC 62-3 (Essential Oils and Cosmetics) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------_____ PΙ US 2002192175 A1 20021219 US 2001-837405 20010418 PRAI US 2001-837405 20010418 CLASS PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES _____ US 2002192175 ICM A61K007-09 ICS. A61K007-13 424070200; 008426000 NCL OS MARPAT 138:28939 A composition for straightening and relaxing hair, contains 0.1-10% one AΒ cationic dye, 1-7% an alkali relaxer, 7-25% an emulsifier, 10-32% an emollient, 5-15% a moisturizer, 0.5-3% a conditioning agent and 35-55% water. A single package hair relaxing-dye composition was prepared from the following composition: cetearyl alc. 8.00, cetyl alc. 1.62, Ceteareth-20 1.85, PEG-4 2.50, mineral oil 23.64, petrolatum 9.86, DEA-Oleth-10 phosphate 0.35, water 42.00, propylene glycol 2.95, LiOH 2.50, polymethacrylamidopropyltrimonium chloride 1.62, PEG-75 lanolin 0.98, benzyl alc. 1.00, Basic Blue-99 (Arianor Steel Blue) 0.50, Basic Red-76 (Arianor Madder Red) 0.18 , tocopherol 0.01, and fragrance 0.40%. cationic dye hair relaxer straightening; emollient dye hair relaxer STstraightening ΙT Alcohols, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (C16-18, emulsifier; hair relaxer and straightening compns. containing cationic dyes and emollients) IΤ Alcohols, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (C16-18, ethoxylated, emulsifier; hair relaxer and straightening compns. containing cationic dyes and emollients) IT (cationic; hair relaxer and straightening compns. containing cationic dyes and emollients) ΙT Hair preparations (conditioners; hair relaxer and straightening compns. containing cationic dyes and emollients) ΙT Hair preparations (dyes; hair relaxer and straightening compns. containing cationic dyes and emollients) ΙT Paraffin oils Petrolatum RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (emollient; hair relaxer and straightening compns. containing cationic dyes and emollients) ITCosmetics (emollients; hair relaxer and straightening compns. containing cationic dyes and emollients) ΙT Lanolin RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (ethoxylated, emollient; hair relaxer and straightening compns. containing cationic dyes and emollients) ΙT Emulsifying agents (hair relaxer and straightening compns. containing cationic dyes and emollients)

TΤ Alkali metal hydroxides RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair relaxer and straightening compns. containing cationic dyes and ΙT Cosmetics (moisturizers; hair relaxer and straightening compns. containing cationic dyes and emollients) IT Hair preparations (straighteners; hair relaxer and straightening compns. containing cationic dyes and emollients) IT 64120-25-8, Guanidine hydroxide RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (activator; hair relaxer and straightening compns. containing cationic dyes ΙT 68039-13-4 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (conditioner; hair relaxer and straightening compns. containing cationic dyes and emollients) ΙT 36653-82-4, Cetyl alcohol 58855-63-3 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (emulsifier; hair relaxer and straightening compns. containing cationic dyes and emollients) ΙT 1305-62-0, Calcium hydroxide, biological studies 1310-65-2, Lithium hydroxide 1310-73-2, Sodium hydroxide, biological studies 26381-41-68123-13-7, Basic Blue 99 68391-30-0, Basic Red 76 68391-32-2 71134-97-9 100224-74-6, Guanidine carbonate 478285**-**23-3 **478285-24-4** RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair relaxer and straightening compns. containing cationic dyes and emollients) ΙT 68039-13-4 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (conditioner; hair relaxer and straightening compns. containing cationic dyes and emollients) RN68039-13-4 HCAPLUS 1-Propanaminium, N,N,N-trimethyl-3-[(2-methyl-1-oxo-2-propenyl)amino]-, CN chloride, homopolymer (9CI) (CA INDEX NAME) CM 1 CRN 51410-72-1

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ || & || \\ \text{Me}_3 + \text{N} - \text{(CH}_2)_3 - \text{NH} - \text{C} - \text{C} - \text{Me} \end{array}$$

CMF C10 H21 N2 O . C1

● Cl-

IT 26381-41-9 68391-30-0, Basic Red 76 68391-32-2 71134-97-9 478285-24-4

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair relaxer and straightening compns. containing cationic dyes and emollients)

RN 26381-41-9 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● cl-

RN 68391-30-0 HCAPLUS

CN 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

• c1-

RN 68391-32-2 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-amino-3-nitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● c1-

RN 71134-97-9 HCAPLUS
CN 2-Naphthalenaminium, 8-[(4-amino-2-nitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● c1-

RN 478285-24-4 HCAPLUS
CN Benzenaminium, 3-[(5-hydroxy-3-methyl-1-phenyl-1H-pyrazol-4-yl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● C1-

2002:964157 HCAPLUS

AN

```
DN
     138:28934
ED
     Entered STN: 20 Dec 2002
ΤI
     Dyeing composition for human keratinous fibers, with oxidation dyes and
     dicationic compounds
ΙN
     Plos, Gregory; Samain, Henri
PΑ
     L'oreal, Fr.
     PCT Int. Appl., 62 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LA
     French
IC
     ICM A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                         KIND
                                 \mathsf{DATE}
                                             APPLICATION NO.
                                                                     DATE
                          ----
                                 _____
                                             ______
PΙ
     WO 2002100366
                          A2
                                 20021219
                                             WO 2002-FR1964
                                                                     20020607
     WO 2002100366
                          ΑЗ
                                 20040219
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                 20021213 FR 2001-7680
20040512 EP 2002-747518
     FR 2825623
                                                                     20010612
                          A1
                          Α2
                                                                     20020607
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRAI FR 2001-7680
                                 20010612
                          Α
    WO 2002-FR1964
                          W
                                 20020607
```

ANSWER 12 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

WO 2002100366 ICM A61K007-13

OS MARPAT 138:28934

AB The invention concerns a dyeing composition for human keratinous fibers and more particularly hair, comprising in a suitable dyeing medium, at least an oxidation dye, and addnl. a diacationic compound The invention also concerns the dyeing methods and device using said composition

ST keratinous fiber hair dye dicationic compd

IT Dyes

(cationic, di-; dyeing composition for human keratinous fibers, with oxidation

dyes and dicationic compds.)

IT Dyes

and

(direct; dyeing composition for human keratinous fibers, with oxidation dyes and dicationic compds.)

IT Oxidizing agents

(dyeing composition for human keratinous fibers, with oxidation dyes and dicationic compds.)

IT Hair preparations

(dyes, oxidative; dyeing composition for human keratinous fibers, with oxidation dyes and dicationic compds.)

IT Hair preparations

(dyes; dyeing composition for human keratinous fibers, with oxidation dyes

dicationic compds.)

IT 26062-79-3, Dimethyldiallylammonium chloride homopolymer

53694-17-0, Acrylic acid Dimethyldiallylammonium

chloride copolymer **163831-67-2** 174514-06-8 178822-20-3

477952-17-3 477952-18-4 477952-19-5 477952-20-8 477952-21-9

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(dyeing composition for human keratinous fibers, with

oxidation dyes and dicationic compds.)

IT 53694-17-0, Acrylic acid Dimethyldiallylammonium

chloride copolymer 163831-67-2

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

(dyeing composition for human keratinous fibers, with

oxidation dyes and dicationic compds.)

RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . Cl

CM 2

CRN 79-10-7 CMF C3 H4 O2

RN 163831-67-2 HCAPLUS

CN Pyridinium, 1-[2-[ethyl[4-[[4-[[4-[[4-[ethyl(2-pyridinioethyl)amino]-2-methylphenyl]azo]benzoyl]amino]phenyl]azo]-3-methylphenyl]amino]ethyl]-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A

●2 C1-

PAGE 1-B

L21 ANSWER 13 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:807271 HCAPLUS

DN 137:299542

ED Entered STN: 23 Oct 2002

TI Acidic hair dye creams

IN Yoshii, Shinichi; Nakaya, Yasuaki; Hiraumi, Takako

PA Takara Belmont Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-13

62-3 (Essential Oils and Cosmetics) FAN.CNT 1 KIND PATENT NO. DATE APPLICATION NO. DATE ____ _____ -----_____ PΙ JP 2002308745 A2 20021023 JP 2001-110057 20010409 PRAI JP 2001-110057 20010409 CLASS PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES JP 2002308745 ICM A61K007-13 This invention relates to hair dyes which are stable and provide long-lasting colors with excellent use feel. The hair creams comprise acidic dyes, polyacrylamide, high-mol.-weight emulsifiers, polyoxyethylene lauryl ether, oils, benzyl alcs., and organic solvents. For example, a hair cream contained polyacrylamide 2, Pemulen TR-2 1, polyoxyethylene lauryl ether 0.3, light isoparaffins 3, benzyl alc. 7, propanol 15, cationic guar gum 0.1, Japan Black 401 0.1, Japan Violet 401 0.1, Japan Orange 205 0.3, lactic acid/Na lactate q.s. to pH 3, and distilled water balance to 100 %. SThair dye cream polyacrylamide benzyl alc IT Isoalkanes RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (acidic hair dye creams) Alcohols, biological studies ΙT RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (benzyl; acidic hair dye creams) ΙT Hair preparations (dyes; acidic hair dye creams) IT 71-23-8, Propanol, biological studies 100-51-6, Benzyl alcohol, biological studies 633-96-5, Japan orange 205 1064-48-8 , Japan Black 401 4430-18-6, Japan Violet 401 9002-92-0, Polyoxyethylene lauryl ether 9003-05-8, Polyacrylamide 145687-02-1, Pemulen TR-2 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (acidic hair dye creams) 633-96-5, Japan orange 205 1064-48-8, Japan Black 401 9003-05-8, Polyacrylamide RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (acidic hair dye creams) RN 633-96-5 HCAPLUS Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt

(9CI) (CA INDEX NAME)

Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 9003-05-8 HCAPLUS

CN 2-Propenamide, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-06-1 CMF C3 H5 N O

$$\begin{matrix} \text{O} \\ || \\ \text{H}_2\text{N}-\text{C}-\text{CH} \longrightarrow \text{CH}_2 \end{matrix}$$

L21 ANSWER 14 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:773592 HCAPLUS

DN 137:299524

ED Entered STN: 11 Oct 2002

TI Direct hair dyes containing acrylamide-sodium

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

```
acryloyldimethyltaurate copolymer as thickening agent
PA
     Wella A.-G., Germany
SO
     Ger. Gebrauchsmusterschrift, 12 pp.
     CODEN: GGXXFR
DT
     Patent
LA
     German
     ICM A61K007-13
IC
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                          APPLICATION NO.
                        ____
PI DE 20207896 U1
JP 2004043431 A2
PRAI DE 2002-20207896 U
     DE 20207896
                                20021010 DE 2002-20207896 20020522
                                20040212 JP 2003-99980
                                                                  20030403
                                20020522
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 DE 20207896 ICM
                        A61K007-13
 JP 2004043431 FTERM 4C083/AC011; 4C083/AC012; 4C083/AC102; 4C083/AC121;
                        4C083/AC122; 4C083/AC151; 4C083/AC152; 4C083/AC441;
                        4C083/AC791; 4C083/AC792; 4C083/AC811; 4C083/AC812;
                        4C083/AC841; 4C083/AC842; 4C083/AC851; 4C083/AC852;
                        4C083/AD071; 4C083/AD072; 4C083/AD211; 4C083/AD282;
                        4C083/BB24; 4C083/CC36; 4C083/DD31; 4C083/DD41;
                        4C083/EE26
AΒ
     The invention concerns hair dyes that contain acidic dyes and
     acrylamide-sodium acryloyldimethyltaurate copolymer as
     thickening agent. The dye compns. further contain benzylalc. and/or
     propyleneglycol, an isoparaffin, a nonionic surfactant, especially
     polyethylene(20)sorbitan monooleate and a polyglucoside. Thus a hair dye
     contained (weight/weight%): D&C Red Nr. 6 0.1; SIMULGEL 600 4.0; benzylalc. 9.0;
     Plantacare 818UP 1.0; hydroxyethyl cellulose 0.5; perfume 0.3;
     1,2-propylene glycol 10.0; ethanol 5.0; water to 100.
ST
     direct hair dye thickening agent crylamide sodium
     acryloyldimethyltaurate copolymer
TΤ
     Glycosides
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (alkyl polyglycosides; direct hair dyes containing acrylamide
        -sodium acryloyldimethyltaurate copolymer as thickening
        agent)
ΤТ
     Thickening agents
        (direct hair dyes containing acrylamide-sodium
        acryloyldimethyltaurate copolymer as thickening agent)
IT
     Isoalkanes
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (direct hair dyes containing acrylamide-sodium
        acryloyldimethyltaurate copolymer as thickening agent)
IT
     Dyes
        (direct; direct hair dyes containing acrylamide-sodium
        acryloyldimethyltaurate copolymer as thickening agent)
IT
    Hair preparations
        (dyes; direct hair dyes containing acrylamide-sodium
        acryloyldimethyltaurate copolymer as thickening agent)
ΙT
    Surfactants
        (nonionic; direct hair dyes containing acrylamide-sodium
        acryloyldimethyltaurate copolymer as thickening agent)
IT
     57-55-6, 1,2-Propylene glycol, biological studies 100-51-6,
    Benzenemethanol, biological studies 633-96-5, Acid Orange 7
    846-70-8, Acid Yellow 1 2611-82-7, Acid Red 18 3520-42-1, Acid Red 52
```

4430-18-6, Acid Violet 43 **5858-81-1** 9005-65-6, Sorbitan, mono-(9Z)-9-octadecenoate, poly(oxy-1,2-ethanediyl) derivs. **38193-60-1**, SIMULGEL 600 217087-75-7, Plantacare 818UP RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (direct hair dyes containing acrylamide -sodium acryloyldimethyltaurate copolymer as thickening agent) ΙT 633-96-5, Acid Orange 7 5858-81-1 38193-60-1, SIMULGEL 600 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (direct hair dyes containing acrylamide -sodium acryloyldimethyltaurate copolymer as thickening agent) RN633-96-5 HCAPLUS Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt CN (9CI) (CA INDEX NAME)

Na

RN 5858-81-1 HCAPLUS
CN 2-Naphthalenecarboxylic acid, 3-hydroxy-4-[(4-methyl-2-sulfophenyl)azo]-,
disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 38193-60-1 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

$$\begin{array}{c} \text{O} \\ \text{NH-C-CH} \\ \text{CH}_2 \\ \text{Me-C-CH}_2 - \text{SO}_3\text{H} \\ \text{Me} \end{array}$$

Na

CM 2

CRN 79-06-1 CMF C3 H5 N O

L21 ANSWER 15 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

```
ΑN
      2002:607625 HCAPLUS
 DN
     137:145197
 ED
     Entered STN: 14 Aug 2002
 TΙ
     Acidic hair dyes containing viscosity enhancers
 ΙN
     Kito, Naoshi; Morita, Kenichi
 PA
     Nonogawa Shoji Ltd., Japan
 SO
     Jpn. Kokai Tokkyo Koho, 4 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                       KIND DATE
                                         APPLICATION NO.
                                                                DATE
     ______
                        ----
                               -----
                                          -----
     JP 2002226335
                        A2
                               20020814
                                          JP 2001-26509
                                                                20010202
PRAI JP 2001-26509
                              20010202
CLASS
 PATENT NO.
               CLASS PATENT FAMILY CLASSIFICATION CODES
 ______
 JP 2002226335 ICM A61K007-13
    This invention relates to hair dye compns. which provide excellent dye
     affinity and smooth colored hair. The hair dyes comprise (1) sclerotium
     gum 0.05-50 % and (2) acrylic acid-alkyl methacrylate
     copolymer 0.1-15 %. For example, a hair dye contained sclerotium gum 2,
     acrylic acid-alkyl methacrylate copolymer 1.5, benzyl
     alc. 10, glycolic acid q.s., Japan Orange 205 0.4, and water balance to
     100 %.
ST
    hair dye sclerotium gum polyacrylate thickener
     Thickening agents
IT
        (acidic hair dyes containing viscosity enhancers)
ΙT
     Hair preparations
        (dyes; acidic hair dyes containing viscosity enhancers)
ΙT
    79-10-7D, Acrylic acid, copolymers with alkyl
    methacrylate 79-41-4D, Methacrylic acid, alkyl esters,
    copolymers with acrylate 633-96-5, Japan Orange 205
    39464-87-4, Sclerotium gum
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
       (acidic hair dyes containing viscosity enhancers)
ΙΤ
    633-96-5, Japan Orange 205
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
       (acidic hair dyes containing viscosity enhancers)
RN
    633-96-5 HCAPLUS
    Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt
    (9CI) (CA INDEX NAME)
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Na

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L21 ANSWER 16 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
     2002:607624 HCAPLUS
AN
DN
     137:145196
ED
     Entered STN: 14 Aug 2002
     Acidic hair dyes containing polymers to improve dyeability
TI
IN
     Osato, Hiroyasu
PΑ
     Arimino Co., Ltd., Japan
     Jpn. Kokai Tokkyo Koho, 9 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                      KIND
                                        APPLICATION NO.
                             DATE
     -----
                      ----
                             _____
                                         -----
    JP 2002226334
PΙ
                       A2
                             20020814
                                        JP 2001-21956
                                                              20010130
PRAI JP 2001-21956
                             20010130
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 JP 2002226334 ICM A61K007-13
    This invention relates to hair dyes which provide easy handling and
    long-lasting colors. The hair dyes comprise 1-vinyl-2-pyrrolidone
    copolymers with 2-acrylamido-2-methylpropanesulfonate derivs.
    For example, a hair dye contained Aristoflex AVC 4, Japan Black 401 0.2,
    Japan Violet 401 0.1, Japan Orange 205 0.2, benzyl alc. 7.5, ethanol 15,
    lactic acid q.s. to pH 2.8, and water balance to 100 %.
ST
    hair dye vinylpyrrolidone acrylamidomethylpropanesulfonate
    copolymer
ΙT
    Hair preparations
       (dyes; acidic hair dyes containing vinyl polymers to improve dyeability)
    100-51-6, Benzyl alcohol, biological studies 633-96-5, Japan
TT
    Orange 205 1064-48-8, Japan Black 401 4430-18-6, Japan Violet
    401 335383-60-3, Aristoflex AVC
```

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (acidic hair dyes containing vinyl polymers to improve dyeability)

IT 633-96-5, Japan Orange 205 1064-48-8, Japan Black 401 335383-60-3, Aristoflex AVC

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (acidic hair dyes containing vinyl polymers to improve dyeability)

RN 633-96-5 HCAPLUS

CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 335383-60-3 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monoammonium salt, polymer with 1-ethenyl-2-pyrrolidinone (9CI) (CA INDEX NAME)

CM 1

CRN 58374-69-9

CMF $\,$ C7 H13 N O4 S $\,$. H3 N

$$\begin{array}{c} \text{O} \\ || \\ \text{NH-C-CH} = \text{CH}_2 \\ | \\ \text{Me-C-CH}_2 - \text{SO}_3\text{H} \\ | \\ \text{Me} \end{array}$$

● NH3

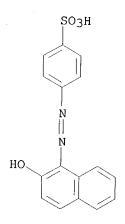
CM 2

CRN 88-12-0 CMF C6 H9 N O

L21 ANSWER 17 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN 2002:553059 HCAPLUS AN DN 137:98675 ED Entered STN: 26 Jul 2002 Hair dye composition comprising direct dyes, quaternary ammonium ΤI compounds, and cationic polymers ΙN Grit, Mustafa PAGoldwell Gmbh, Germany Eur. Pat. Appl., 11 pp. CODEN: EPXXDW DTPatent LA German IC ICM A61K007-13 CC 62-4 (Essential Oils and Cosmetics) FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. APPLICATION NO. DATE ---------EP 1224927 EP 2002-1025 A1 20020724 20020117 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR DE 10101946 A1 20020801 DE 2001-10101946
JP 2002249419 A2 20020806 TE 2001-10101946 20010117 JP 2002-5607 20020115 PRAI DE 2001-10101946 20010117 CLASS PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES -----_____ EP 1224927 ICM A61K007-13 EP 1224927 ECLA A61K008/34; A61K008/41L; A61Q005/10

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DE 10101946
                  ECLA
                         A61K008/34; A61K008/41L; A61Q005/10
      The invention concerns hair dyes that contain direct dyes, long-chain
      quaternary ammonium compds., cationic polymers, nonionic, amphoteric or
      zwitterionic polymers, ethanol, propanol or isopropanol and water.
      dyes are packaged in a transparent container. Thus a dye contained
      (weight/weight%): dimethicone copolyol 1.50; cetrimonium chloride 0.80; ethanol
      15.00; polyvinylpyrrolidone 0.50; propylene carbonate 15.00; lactic acid
      (90%) 5.00; sodium hydroxide (32%) 0.20; polyquaternium 6 0.60; quaternary
      dimethylaminoethylmethacrylate homopolymer 3.50; Acid Orange 7
     0.15; Acid Yellow 3 0.10; Acid Violet 43 0.25; water to 100.
     direct hair dye compn quaternary ammonium compd cationic polymer
 ST
 ΙT
     Polyelectrolytes
         (amphoteric; hair dye composition comprising direct dyes, quaternary
         ammonium compds., and cationic polymers)
IT
     Polyelectrolytes
         (cationic; hair dye composition comprising direct dyes, quaternary ammonium
        compds., and cationic polymers)
IΤ
     Polyoxyalkylenes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me, Me hydrogen polysiloxane-; hair dye composition comprising direct
        dyes, quaternary ammonium compds., and cationic polymers)
IT
     Polysiloxanes, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (di-Me, Me hydrogen, polyoxyalkylene-; hair dye composition comprising
        direct dyes, quaternary ammonium compds., and cationic polymers)
ΙT
        (direct; hair dye composition comprising direct dyes, quaternary ammonium
        compds., and cationic polymers)
IT
     Hair preparations
        (dyes; hair dye composition comprising direct dyes, quaternary ammonium
        compds., and cationic polymers)
IT
     Transparency
     Viscosity
        (hair dye composition comprising direct dyes, quaternary ammonium compds.,
        and cationic polymers)
IT
     Polymers, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dye composition comprising direct dyes, quaternary ammonium compds.,
        and cationic polymers)
IT
     Quaternary ammonium compounds, biological studies
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (long-chain; hair dye composition comprising direct dyes, quaternary
        ammonium compds., and cationic polymers)
ΙT
     Polyelectrolytes
        (zwitterionic; hair dye composition comprising direct dyes, quaternary
        ammonium compds., and cationic polymers)
    64-17-5, Ethanol, biological studies 67-63-0, Isopropanol, biological
ΙT
    studies
              71-23-8, Propanol, biological studies
                                                     108-32-7, Propylene
                112-02-7, Cetrimonium chloride 112-03-8, Stearyltrimethyl
    carbonate
    ammonium chloride 632-99-5, Basic Violet 14 633-96-5, Acid
    Orange 7
               2784-89-6, HC-Red 1
                                     4065-45-6, Benzophenone-4
                                                                  4430-18-6,
    Acid Violet 43
                     8004-92-0, Acid Yellow 3
                                                 9003-39-8,
    Polyvinylpyrrolidone
                          25086-89-9, Vinylacetate-vinylpyrrolidone copolymer
    26062-79-3, Polyquaternium 6 26161-33-1 26381-41-9,
    Basic Brown 16
                     68123-13-7, Basic Blue 99 68391-30-0, Basic Red
         68391-31-1, Basic Yellow 57
                                       81859-24-7, Polyquaternium-10
    92183-41-0, Polyquaternium-4
                                   473664-54-9, Salcare SC 96
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
       (hair dye composition comprising direct dyes,
```

quaternary ammonium compds., and cationic polymers) RE.CNT THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD 5 (1) Canivet, P; US 4820308 A 1989 HCAPLUS (2) Goldwell Gmbh; DE 19735851 A 1999 HCAPLUS (3) Joh Andre Sebald Gmbh; DE 2151131 A 1973 HCAPLUS (4) Kao Corp; EP 0470381 A 1992 HCAPLUS (5) Kao Corp; EP 0503507 A 1992 HCAPLUS 633-96-5, Acid Orange 7 26161-33-1 26381-41-9, Basic Brown 16 **68391-30-0**, Basic Red 76 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dye composition comprising direct dyes, quaternary ammonium compds., and cationic polymers) RN 633-96-5 HCAPLUS Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt CN (9CI) (CA INDEX NAME)



Na

RN 26161-33-1 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,
chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1 CMF C9 H18 N O2 . Cl

● cl-

RN 26381-41-9 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● C1-

RN 68391-30-0 HCAPLUS

CN 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

• c1-

L21 ANSWER 18 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2002:47499 HCAPLUS

DN 136:107197

ED Entered STN: 18 Jan 2002

TI Hair coloring composition containing a semipermanent cationic dye and a polymer

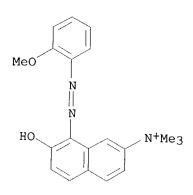
IN Pollack, George

PA Hairmaker Llc (A Delaware Corp.), USA

```
Eur. Pat. Appl., 12 pp.
      CODEN: EPXXDW
 DT
      Patent
 LA
      English
 IC
      ICM A61K007-13
 CC
      62-3 (Essential Oils and Cosmetics)
 FAN.CNT 2
      PATENT NO.
                         KIND
                                 DATE
                                           APPLICATION NO.
                                                                   DATE
                                 -----
 PΤ
      EP 1172081
                          A1
                                 20020116 EP 2001-111544
                                                                    20010511
          R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
      US 6506374
                      B1
                                20030114
                                            US 2000-675838
                                                                    20000929
 PRAI US 2000-568830
                          A
                                 20000511
      US 2000-675838
                          A
                                 20000929
 CLASS
  PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
  -----
 EP 1172081 ICM
US 6506374 ECLA
                        A61K007-13
                 ECLA A61K007/13
     A hair coloring composition for flow by capillary action comprises a hair
     substantive direct dye or washable color, i.e., a cationic semipermanent
     dye, in a liquid vehicle with controlled vapor pressure to have a predetd.
     rate of evaporation, and an optional polymeric ruboff protector component for
     preventing ruboff of the color of the direct dye. The composition has a
     controlled viscosity to be reasonably free flowing yet not drip or cause
     build-up on the hair. For example, a hair coloring composition contained (by
     weight) four phases corresponding to the process steps used in their
manufacture:
     Phase A - water 40-50%, PVA/VA copolymer 2-4%, Crotein Hydrotriticum QN (a
     cationic protein for conditioning) 0.05-0.5%, Dow Corning silicone 193
     (for shine) 0.05-0.5%, Triethanolamine (ph adjuster) as needed to pH 8.5;
     Phase B - water 35-40%, Arianor Steel Blue 0.05-2.0%, Arianor Madder Red
     0.1-1.0%, Arianor Straw Yellow 0.05-1.0%, Arianor Crazy Gold 0.05-0.7%,
     Arianor Flame Red 0.05-0.7%, Arianor Orange 0.05-0.7%, Arianor Sienna
     Brown 0.05-1.0%, Lowacryl Violet 4 0.05-0.3%, Lowacryl
     Violet 14 0.05-0.3%, Lowacryl Red 2 0.05-0.3%; Phase C - ethanol
     10-20%; Phase D - perfume 0.05-0.2%.
ST
     cationic semipermanent hair dye polymer ruboff protector
ΙT
     Dyes
        (cationic; hair coloring composition containing semipermanent cationic dye
and
        polymeric ruboff protector)
ΙT
     Dyes
        (diphenyldiamine; hair coloring composition containing semipermanent
cationic
        dye and polymeric ruboff protector)
ΙT
     Dyes
        (direct; hair coloring composition containing semipermanent cationic dye and
        polymeric ruboff protector)
ΙT
     Hair preparations
        (dyes; hair coloring composition containing semipermanent cationic dye and
        polymeric ruboff protector)
TΤ
     Anthraquinone dyes
     Azo dyes
     Viscosity
        (hair coloring composition containing semipermanent cationic dye and
polymeric
       ruboff protector)
```

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IT
      Detergents
      Surfactants
          (hair coloring composition containing semipermanent cationic dye and
         ruboff protector free of surfactants or detergents)
 ΙT
      Dyes
         (nitro; hair coloring composition containing semipermanent cationic dye and
         polymeric ruboff protector)
 ΙT
      Vinyl compounds, biological studies
      RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological
      study); USES (Uses)
         (polymers; hair coloring composition containing semipermanent cationic dye
 and
         polymeric ruboff protector)
 IT
      Dyes
         (quinone-imine containing quaternary ammonium group; hair coloring
 composition
         containing semipermanent cationic dye and polymeric ruboff protector)
 IT
      Alcohols, biological studies
      RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (solvents; hair coloring composition containing semipermanent cationic dye
 and
         polymeric ruboff protector)
 ΤТ
      68391-30-0, C.I. Basic Red 76
      RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (Arianor Madder Red; hair coloring composition containing
         semipermanent cationic dye and polymeric ruboff protector)
      26381-41-9, C.I. Basic Brown 16
 IΤ
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (Arianor Mahogany; hair coloring composition containing semipermanent
         cationic dye and polymeric ruboff protector)
ΙT
     226940-14-3, Arianor Orange
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (Arianor Orange; hair coloring composition containing semipermanent
        cationic dye and polymeric ruboff protector)
IΤ
     176742-32-8, C.I. Basic Brown 17
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (Arianor Sienna Brown; hair coloring composition containing
        semipermanent cationic dye and polymeric ruboff protector)
TΤ
     68123-13-7, C.I. Basic Blue 99
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (Arianor Steel Blue; hair coloring composition containing semipermanent
cationic
        dye and polymeric ruboff protector)
     68391-31-1, C.I. Basic Yellow 57
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (Arianor Straw Yellow; hair coloring composition containing semipermanent
        cationic dye and polymeric ruboff protector)
ΙT
     477-73-6, Lowacryl Red 2
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (Lowacryl Red 2; hair coloring composition containing semipermanent
        cationic dye and polymeric ruboff protector)
ΙT
     632-99-5, Lowacryl Violet 14
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (Lowacryl Violet 14; hair coloring composition containing
        semipermanent cationic dye and polymeric ruboff protector)
ΙT
     2390-59-2, Lowacryl Violet 4
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (Lowacryl Violet 4; hair coloring composition containing semipermanent
```

cationic dye and polymeric ruboff protector) IT 75-65-0, tert-Butyl alcohol, biological studies 78-92-2, 2-Butanol 25265-75-2, Butylene glycol **68391-32-2** 389132-49-4, Arianor Crazy Gold 389132-51-8, Arianor Flame Red RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair coloring composition containing semipermanent cationic dye and polymeric ruboff protector) 25086-89-9, Vinyl acetate-vinyl pyrrolidone copolymer RL: COS (Cosmetic use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses) (hair coloring composition containing semipermanent cationic dye and polymeric ruboff protector) IT 64-17-5, Ethyl alcohol, biological studies 67-63-0, Isopropyl alcohol, biological studies 71-36-3, Butyl alcohol, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (solvent; hair coloring composition containing semipermanent cationic dye and polymeric ruboff protector) RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD (1) Boots Co; WO 9744002 A 1997 HCAPLUS (2) Wella; DE 19651482 C 1998 HCAPLUS TΤ 68391-30-0, C.I. Basic Red 76 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (Arianor Madder Red; hair coloring composition containing semipermanent cationic **dye** and polymeric ruboff protector) RN 68391-30-0 HCAPLUS 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, CN chloride (9CI) (CA INDEX NAME)



• c1-

● c1-

IT 226940-14-3, Arianor Orange

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(Arianor Orange; hair coloring composition containing semipermanent cationic dye and polymeric ruboff protector)

RN 226940-14-3 HCAPLUS

CN Benzenaminium, 3-[(4-amino-2,5-dimethoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{OMe} \\ \text{N} = \text{N} \\ \text{OMe} \end{array}$$

● C1-

IT 176742-32-8, C.I. Basic Brown 17

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(Arianor Sienna Brown; hair coloring composition containing semipermanent cationic dye and polymeric ruboff protector)

RN 176742-32-8 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminonitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

 $D1-NO_2$

IT 68391-32-2

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(hair coloring composition containing semipermanent cationic
dye and polymeric ruboff protector)

RN 68391-32-2 HCAPLUS CN 2-Naphthalenaminium.

2-Naphthalenaminium, 8-[(4-amino-3-nitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● C1-

L21 ANSWER 19 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:930190 HCAPLUS

DN 136:58501

ED Entered STN: 26 Dec 2001

TI Storage-stable semipermanent hair dyes

IN Tanba, Masanao; Hayashi, Hideki

PA Hoyu Co., Ltd., Japan

```
Jpn. Kokai Tokkyo Koho, 6 pp.
 SO
      CODEN: JKXXAF
 DT
      Patent
 LA
      Japanese
 TC
      ICM A61K007-13
      62-3 (Essential Oils and Cosmetics)
 CC
 FAN.CNT 1
      PATENT NO.
                         KIND DATE
                                             APPLICATION NO. DATE
                         ----
                          A2
      JP 2001354529
                                 20011225
                                             JP 2000-178682
                                                                     20000614
 PRAI JP 2000-178682
                                 20000614
 CLASS
  PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
  JP 2001354529 ICM A61K007-13
      The hair dyes contain (A) hydroxyethanediphosphonic acid (I) and/or its
      salts, (B) water-soluble polymers selected from (b-1) hydroxyalkyl cellulose
      and CMC-Na and (b-2) carboxyvinyl polymers, poly(acrylic acid)
      or its salts, and/or acrylic acid-alkyl methacrylate
      copolymers, and (C) direct dyes. A composition (pH 3.5) containing I 0.05,
      hydroxyethyl cellulose 3.0, CMC-Na 1.0, Japan Black 401 0.5, Japan Purple
      401 0.2, Japan Orange 205 0.5, benzyl alc. 5.0, N-methylpyrrolidone 10.0,
      citric acid, and H2O to 100 weight% showed no change in color after 2-wk
      storage in a sunny place and no change in viscosity after 1-mo storage at
     hair dye hydroxyethanediphosphonate water sol polymer; hydroxyethyl
ST
     cellulose CMC polyacrylate hair dye; carboxyvinyl polymer
     polymethacrylate hydroxyethanediphosphonate hair dye
     Vinyl compounds, biological studies
 ΙT
    RL: COS (Cosmetic use); PRP (Properties); BIOL (Biological study); USES
         (carboxy-containing, polymers; storage-stable semipermanent hair dyes
        containing hydroxyethanediphosphonates and water-soluble polymers)
IT
     Hair preparations
        (dyes; storage-stable semipermanent hair dyes containing
        hydroxyethanediphosphonates and water-soluble polymers)
ΙT
     Polymers, biological studies
     RL: COS (Cosmetic use); PRP (Properties); BIOL (Biological study); USES
        (water-soluble; storage-stable semipermanent hair dyes containing
        hydroxyethanediphosphonates and water-soluble polymers)
TΤ
     79-10-7D, Acrylic acid, polymers with alkyl
     methacrylates 79-41-4D, Methacrylic acid, alkyl
     esters, polymers with acrylic acid 99-56-9, p-Nitro-o-phenylenediamine 633-96-5, Japan Orange 205
     1064-48-8, Japan Black 401 2809-21-4, Hydroxyethanediphosphonic
            4430-18-6, Japan Purple 401 5307-14-2, Nitro-p-phenylenediamine
     9003-01-4, Poly(acrylic acid) 9004-32-4 9004-62-0,
     Hydroxyethyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose
     RL: COS (Cosmetic use); PRP (Properties); BIOL (Biological study); USES
     (Uses)
        (storage-stable semipermanent hair dyes containing
        hydroxyethanediphosphonates and water-soluble polymers)
     633-96-5, Japan Orange 205 1064-48-8, Japan Black 401
ΙT
     9003-01-4, Poly(acrylic acid)
     RL: COS (Cosmetic use); PRP (Properties); BIOL (Biological study); USES
        (storage-stable semipermanent hair dyes containing
       hydroxyethanediphosphonates and water-soluble polymers)
```

RN 633-96-5 HCAPLUS

CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

● Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

L21 ANSWER 20 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

```
2001:923577 HCAPLUS
 ΑN
 DN
      136:42518
 ED
      Entered STN: 21 Dec 2001
 TI
      Hair bleaches and dyes containing alkalies and oxidants
 IN
      Matsuo, Takashi; Miyabe, Hajime; Shibata, Yutaka
      Kao Corporation, Japan
 PA
 SO
      PCT Int. Appl., 32 pp.
      CODEN: PIXXD2
 DT
      Patent
 LA
     Japanese
 IC
      ICM A61K007-13
      ICS A61K007-135
 CC
      62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                      APPLICATION NO.
                                                                   DATE
                                _____
                         ----
                         A1
ΡI
     WO 2001095869
                                20011220 WO 2001-JP4835
                                                                   20010608
         W: US
         RW: DE, FR, GB
     JP 2001354530
                          A2
                              20011225 JP 2000-175133
                                                                   20000612
     JP 2001354531
                         A2
                               20011225 JP 2000-175134
                                                                   20000612
     EP 1291006
                         A1
                                20030312
                                            EP 2001-938562
                                                                   20010608
         R: DE, FR, GB
                     A1
     US 2003192133
                                20031016
                                            US 2002-275736
                                                                   20021108
PRAI JP 2000-175133
                          A
                                20000612
     JP 2000-175134
                          Α
                                20000612
     WO 2001-JP4835
                         W
                                20010608
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
 ------
 WO 2001095869 ICM
                        A61K007-13
                 ICS
                        A61K007-135
     An oxidation-type hair bleach or dye which is composed of a first lotion
     containing an alkali agent and a second lotion containing an oxidizing agent,
     contains the following components (A), (B), (C), and (D) in amts. described below based on the whole of the mixture of the first lotion with
     the second one, and has a pH of 8 to 12: (A) 8-40~\% a water-compatible
     organic solvent exhibiting an octanol-water partition coefficient (logP) of
     above at 25°C and having a mol. weight of \leq 200, (B) 0.1-10 %
     an alkali agent, (C) 0.1-12 % an oxidizing agent, hydrogen peroxide, and
     (D) 25-70 % water. This hair bleach or dye has a high bleaching power,
     can dye the hair in a good bright color, and is lowered in the irritant stench and the irritation to the scalp. A hair bleach comprised (1) a
     first lotion containing Na polyoxyethylene lauryl sulfate 15, coco fatty acid
     diethanolamide 40, benzyl alc. 25, ammonia water (28 %) 7, and water 13 %
     and (2) a second lotion containing Na polyoxyethylene lauryl sulfate 20, coco
     fatty acid diethanolamide 2, H2O2 solution (35 %) 17, phosphoric acid solution
     (75 %) 0.3, and water 60.7 %.
     hair bleach dye oxidant alkali surfactant
ST
IΤ
     Sulfonic acids, biological studies
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (1-alkenesulfonic, sodium salts; hair bleaches and dyes containing alkalies
        and oxidants and surfactants in organic solvents)
    Sulfonic acids, biological studies
TΤ
    RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (alkanesulfonic, sodium salts; hair bleaches and dyes containing alkalies
        and oxidants and surfactants in organic solvents)
ΙT
    Hair preparations
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1, 4

```
(bleaches; hair bleaches and dyes containing alkalies and oxidants and
         surfactants in organic solvents)
 ΙT
      Amides, biological studies
      RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (coco, N,N-bis(hydroxyethyl); hair bleaches and dyes containing alkalies
         and oxidants and surfactants in organic solvents)
 ĪΤ
      Polysiloxanes, biological studies
      RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (di-Me, polyoxyethylene-, graft; hair bleaches and dyes containing alkalies
         and oxidants and surfactants in organic solvents)
 ΙT
      Hair preparations
         (dyes; hair bleaches and dyes containing alkalies and oxidants and
         surfactants in organic solvents)
 ΙT
      Quaternary ammonium compounds, biological studies
      RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (polymers; hair bleaches and dyes containing alkalies and oxidants and
         surfactants in organic solvents)
      95-55-6, o-Aminophenol
                               95-70-5, Toluene-2,5-diamine
      p-Nitro-o-phenylenediamine
                                  100-51-6, Benzyl alcohol, biological studies
     123-30-8, p-Aminophenol 591-27-5 622-08-2, 2-Benzyloxyethanol 1336-21-6, Ammonia water 2475-46-9, Disperse blue 3 2835-96-3
                                                                2835-96-3,
     p-Amino-o-cresol 3179-90-6, Disperse blue 7 3520-42-1, Acid red 52 4292-10-8, Laurylamidopropylbetaine 7722-84-1, Hydrogen peroxide,
     biological studies 8004-92-0, Acid yellow 3 9002-92-0, Polyoxyethylene
     lauryl ether 9004-82-4, Sodium polyoxyethylene lauryl ether sulfate
     9016-45-9, Polyoxyethylene nonyl phenyl ether 12221-52-2, Basic red 22
     24938-91-8, Polyoxyethylene tridecyl ether 26590-05-6, Merquat
            29923-31-7, Sodium N-lauroyl glutamate
                                                     32128-65-7, Polyoxyethylene
     octyl dodecyl ether 53694-17-0, Merquat 280
                                                      54381-16-7,
     N, N-Bis(2-hydroxyethyl)p-phenylenediamine sulfate 68391-30-0,
                     70643-19-5, 2,4-Diaminophenoxyethanol 81859-24-7, Catinal
     Basic red 76
     LC 100
               160950-38-9
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (hair bleaches and dyes containing alkalies and
        oxidants and surfactants in organic solvents)
RE.CNT
               THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
(1) Wella Aktiengesellschaft; JP 1053970 A 1997
(2) Wella Aktiengesellschaft; DE 19618595 A 1997 HCAPLUS
(3) Wella Aktiengesellschaft; EP 806198 A2 1997 HCAPLUS
(4) Wella Aktiengesellschaft; BR 9703093 A 1997 HCAPLUS
IT
     26590-05-6, Merquat 550 53694-17-0, Merquat 280
     68391-30-0, Basic red 76
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair bleaches and dyes containing alkalies and
        oxidants and surfactants in organic solvents)
     26590-05-6 HCAPLUS
RN
     2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with
CN
     2-propenamide (9CI) (CA INDEX NAME)
     CM
          1
     CRN
          7398-69-8
          C8 H16 N . Cl
     CMF
```

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{H}_2\text{C} &= \text{CH-CH}_2 - \text{N} \\ | \\ | \\ \text{Me} \end{array} \text{CH}_2 - \text{CH} &= \text{CH}_2 \\ | \\ \text{Me} \end{array}$$

● Cl-

CM 2

CRN 79-06-1 CMF C3 H5 N O

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{H}_2\text{N}-\text{C}-\text{CH} \end{array} \text{CH}_2$$

RN 53694-17-0 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

● cl-

CM 2

CRN 79-10-7 CMF C3 H4 O2

RN 68391-30-0 HCAPLUS CN 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-,

KATHLEEN FULLER EIC 1700 REMSEN 4B28 571/272-2505

chloride (9CI) (CA INDEX NAME)

● cl-

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ANSWER 21 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
      2001:923231 HCAPLUS
 DN
      136:58497
 ED
      Entered STN: 21 Dec 2001
 TI
      Hair dyeing compositions containing oxocyclopentenes
      Gross, Wibke; Hoeffkes, Horst; Martin, Hans-Dieter; Moeller, Hinrich;
 IN
      Oberkobusch, Doris
      Henkel K.-G.a.A., Germany
 PA
      Ger. Offen., 18 pp.
 SO
      CODEN: GWXXBX
 DT
      Patent
 LA
      German
 IC
      ICM A61K007-13
 CC
      62-3 (Essential Oils and Cosmetics)
      Section cross-reference(s): 23
 FAN.CNT 1
     PATENT NO.
                        KIND
                             DATE
                                          APPLICATION NO.
                                                               DATE
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                        ----
                               -----
PI
     DE 10029933
                         A1
                               20011220
                                          DE 2000-10029933
                                                                20000617
     WO 2001097762
                         A1
                               20011227
                                          WO 2001-EP6545
                                                                20010609
         W: AU, JP, US
         RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, TR
     EP 1311231
                               20030521
                         Α1
                                         EP 2001-949394
                                                              20010609
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, FI, CY, TR
 PRAI DE 2000-10029933
                         Α
                               20000617
     WO 2001-EP6545
                         W
                               20010609
 CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
  -----
                _____
 DE 10029933
               ICM
                      A61K007-13
OS
    MARPAT 136:58497
GΙ
```

$$R^1$$
 R^2 0 R^3 0 R^4 1

studies

65-49-6

studies

AΒ Hair dyes contain oxocyclopentene derivative (I, R1 and R2 = H, or a C1-4alkyl, R3 and R4 = H, C1-4 alkyl or group of aryls, the remainder of R1and R2 and/or R3 and R4 can form a ring, and X = C:O, C:S or CH2). Thus, 2,5,5-trimethyl-3-oxocyclopent-1-enecarboxaldehyde (II) was prepared and used in a formulation consisting of II 8, Natrosol 250HR 2.0 and water to 100 g. SToxacyclopentene hair dye prepn Amines, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (aromatic, primary; hair dyeing compns. containing oxocyclopentenes) ΙT Amines, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (aryl, secondary; hair dyeing compns. containing oxocyclopentenes) ΙT Amines, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (diamines, aromatic; hair dyeing compns. containing oxocyclopentenes) ITHair preparations (dyes; hair dyeing compns. containing oxocyclopentenes) ΙT Shampoos (hair dyeing compns. containing oxocyclopentenes) TΨ Amino acids, biological studies Nitriles, biological studies Phenols, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hair dyeing compns. containing oxocyclopentenes) TΤ Caseins, biological studies Collagens, biological studies Elastins Keratins RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (hydrolyzates; hair dyeing compns. containing oxocyclopentenes) IT Peptides, biological studies RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (oligopeptides; hair dyeing compns. containing oxocyclopentenes) IT Protein hydrolyzates RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (soya; hair dyeing compns. containing oxocyclopentenes) ΙT Protein hydrolyzates RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (wheat gluten; hair dyeing compns. containing oxocyclopentenes) Glutens RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (wheat, hydrolyzates; hair dyeing compns. containing oxocyclopentenes) 56-87-1, L-Lysine, biological studies 59-48-3 59-92-7, biological

60-18-4, L-Tyrosine, biological studies

67-52-7, 2,4,6(1H,3H,5H)-Pyrimidinetrione

biological studies 63-91-2, L-Phenylalanine, biological studies

70-26-8, L-Ornithine 71-00-1, L-Histidine, biological studies

62-53-3, Benzenamine,

70-18-8, biological

73-22-3, L-Tryptophan, biological studies 74-79-3, L-Arginine, biological studies 77-32-7 77-32-7 81-11-8 83-30-7 8 84-65-1, 9,10-Anthracenedione 83-33-0 1,5-Naphthalenediol 84-65-1D, Anthraquinone, derivs. 87-02-5 87-66-1, 1,2,3-Benzenetriol 88-74-4 89-57-6 89-86-1 90-05-1 90-15-3, 1-Naphthalenol 90-20-0 91-29-2 92-44-4, 2,3-Naphthalenediol 92-65-9 95-54-5, 1,2-Benzenediamine, biological studies 95-55-6 95-70-5 95-88-5 96-91-3 96-93-5 98-37-3 99-05-8 99-07-0 99-31-0 99-50-3 99-56-9 100-01-6, biological studies 101-77-9 101-80-4 102-32-9 106-50-3, 1,4-Benzenediamine, biological studies 107-95-9, 108-45-2, 1,3-Benzenediamine, biological studies β-Alanine 108-46-3, 1,3-Benzenediol, biological studies 108 - 72 - 5, 1,3,5-Benzenetriamine 108-73-6, 1,3,5-Benzenetriol 109-00-2, 3-Pyridinol 110-85-0, Piperazine, biological studies 110-86-1, Pyridine, biological studies 110-89-4, Piperidine, biological studies 116-63-2 118-12-7 118-70-7, 4,5,6-Pyrimidinetriamine 118-92-3 119-34-6 119-70-0 119-72-2 119-59-5 120-72-9, 1H-Indole, biological studies 120-80-9, 1,2-Benzenediol, biological studies 121-47-1 121-57-3 123-30-8 123-31-9, 1,4-Benzenediol, biological 123-75-1, Pyrrolidine, biological studies 139-65-1 141-8 studies 141-86-6, 2,6-Pyridinediamine 142-08-5, 2(1H)-Pyridinone 147-85-3, L-Proline, biological studies 149-87-1 149-91-7, biological studies 150-13-0 150-19-6 150-75-4 150-76-5 156-81-0, 2,4-Pyrimidinediamine 288-13-1, 1H-Pyrazole 288-3 biological studies 288-88-0, 1H-1,2,4-Triazole 288-32-4, 1H-Imidazole, 462-08-8, 3-Pyridinamine 480-66-0 488-87-9 496-73-1 498-94-2. 4-Piperidinecarboxylic acid 498-95-3, 3-Piperidinecarboxylic acid 500-85-6D, Indophenol, derivs. 504-15-4 504-17-6 4-Pyridinamine 504-29-0, 2-Pyridinamine 517-22-6 533-31-3, 1,3-Benzodioxol-5-ol 533-73-3, 1,2,4-Benzenetriol 535-75-1, 2-Piperidinecarboxylic acid 535-87-5 537-65-5 553-86-6, 2(3H)-Benzofuranone 556-03-6, Tyrosine 570-24-1 578-66-5, 8-Quinolinamine 580-17-6, 3-Quinolinamine 580-22-3, 2-Quinolinamine 582-17-2, 2,7-Naphthalenediol 591-27-5 603-81-6 606-23-5, 1H-Indene-1,3(2H)-dione 606-55-3 606-57-5 608-08-2 608-25-3 610-74-2 610-81-1 611-03-0 611-98-3 614-82-4 615-6 615-71-4, 1,2,4-Benzenetriamine 616-45-5, 2-Pyrrolidinone 615-66-7 616-47-7 623-09-6 626-64-2, 4-Pyridinol 619-05-6 636-25-9 876-87-9 934-22-5, 1H-Benzimidazol-5-amine 1004-74-6, Pyrimidinetetramine 1123-55-3, 7-Benzothiazolamine 1004-75-7 1123-93-9, 5-Benzothiazolamine 1125-60-6, 5-Isoquinolinamine 1197-55-3 1455-77-2, 1H-1,2,4-Triazole-3,5-diamine 1571-72-8 1820-80-0, 1H-Pyrazol-3-amine 1953-54-4, 1H-Indol-5-ol 2374-03-0 2380-84-9, 2380-86-1, 1H-Indol-6-ol 2380-94-1, 1H-Indol-4-ol 1H-Indol-7-ol 2510-01**-**2 2785-06-0 2835-98-5 2654-52-6 2835-99-6 2871-01-4 3131-52-0, 1H-Indole-5,6-diol 3158-63-2 3167-49-5 3342-78-7 3855-78-5 4331-29-7, 1H-Benzimidazol-4-amine 4506-66-5 4928-43-2 5007-67-0 5099-39-8 5131-58-8 5192-03-0, 1H-Indol-5-amine 5192-04-1, 1H-Indol-7-amine 5192-23-4, 1H-Indol-4-amine 5217-47-0 5307-14-2 5318-27-4, 1H-Indol-6-amine 5345-47-1 5418-63-3 5434-20-8 5718-83-2 **5850-35-1** 5959-52-4 6201-65-6 6247-27-4 6259-50-3 6358-09-4 6399-72-0 6628-04-2 6634-82-8 6967-12-0, 1H-Indazol-6-amine 7336-20-1 7411-49-6 7575-35-1 7749-47-5 7768-28-7 10173-66-7 13754-19-3, 4,5-Pyrimidinediamine 14268-66-7, 1,3-Benzodioxol-5-amine 14338-36-4 16082-33-0, 1H-Pyrazole-3,5-diamine 16859-86-2 16867-03-1 19335-11-6, 1H-Indazol-5-amine 20103-09-7 22715-34-0 23244-87-3, 2,4,5-Pyridinetriamine 23894-07-7 24119-24-2 24905-87-1 28020-38-4 28491-52-3 29539-03-5 29705-39-3 31835-64-0 39267-74-8

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41927-50-8
                   41946-53-6
                                 42952-29-4
                                              49647-58-7
                                                           50610-28-1
      51387-92-9
                   55302-96-0
                                 56932-44-6
                                              58480-17-4
                                                           61224-35-9
      61693-42-3
                   62496-02-0
                                 62952-42-5
                                              63969-46-0
                                                           64993-07-3
      66566-48-1
                   66635-40-3 68391-32-2
                                            69825-83-8
                                                         70643-19-5
      71134-97-9
                   74918-21-1
                                77484-77-6
                                              79352-72-0
                                                           82576-75-8
      83220-31-9
                   83220-31-9D, mixts. containing
                                                     83763-47-7
      RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (hair dyeing compns. containing oxocyclopentenes)
 ΙT
      83960-83-2
                   84540-47-6
                                84540-50-1
                                              85679-78-3
                                                           85926-99-4
      87798-73-0
                   87814-15-1
                                90817-34-8
                                              93841-24-8
                                                           93923-57-0
      95576-89-9
                   102574-14-1
                                 104333-09-7
                                                108946-76-5
                                                              110102-86-8
      110952-48-2
                    114402-54-9
                                  115423-86-4
                                                 117907-43-4
                                                               126335-41-9
      128729-30-6
                    130582-56-8
                                  137290-86-9
                                                 144644-13-3
                                                               155601-17-5
      159661-42-4
                    202525-73-3
                                  202525-74-4
                                                 202525-75-5
                                                               202525-76-6
      202525-77-7
                    202525-78-8
                                  202525-79-9
                                                 211872-02-5
                                                               215377-52-9
      220118-56-9
                    251450-62-1
                                  346593-13-3 346684-81-9
     380897-75-6 380897-77-8 380897-79-0
     381211-38-7
                    381211-39-8
                                  381211-42-3 381211-44-5
     381211-96-7
                    381212-15-3
                                  381212-17-5
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
         (hair dyeing compns. containing oxocyclopentenes)
IT
     58626-49-6P
                   108946-70-9P
     RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
        (hair dyeing compns. containing oxocyclopentenes)
     75-52-5, reactions
IT
                         78-92-2, 2-Butanol
                                               97-86-9, Isobutyl
     methacrylate
                   541-47-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (hair dyeing compns. containing oxocyclopentenes)
TΤ
                   30434-70-9P 58626-47-4P
                                              58626-48-5P
                                                              109892-46-8P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (hair dyeing compns. containing oxocyclopentenes)
IT
     5850-35-1 6247-27-4 68391-32-2
     71134-97-9 346684-81-9 380897-75-6
     380897-77-8 380897-79-0 381211-44-5
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dyeing compns. containing oxocyclopentenes)
RN
     5850-35-1 HCAPLUS
     2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(3-nitrophenyl)azo]-6-
CN
     (phenylazo) -, disodium salt (9CI) (CA INDEX NAME)
```

●2 Na

RN 6247-27-4 HCAPLUS CN Phenol, 2-[(2,4-diamino-5-methylphenyl)azo]-4,6-dinitro- (9CI) (CA INDEX NAME) $\begin{array}{c|c} \mathsf{O_2N} & & \mathsf{Me} \\ \hline & \mathsf{N} & \mathsf{N} & \mathsf{N} \\ \hline & \mathsf{OH} & \mathsf{H_2N} & \mathsf{NH_2} \\ \hline & \mathsf{NO_2} & & \\ \end{array}$

RN 68391-32-2 HCAPLUS
CN 2-Naphthalenaminium, 8-[(4-amino-3-nitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl-

RN 71134-97-9 HCAPLUS
CN 2-Naphthalenaminium, 8-[(4-amino-2-nitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl-

RN 346684-81-9 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 380897-75-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(3-nitrophenyl)azo]-6-(phenylazo)- (9CI) (CA INDEX NAME)

RN 380897-77-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(2-hydroxy-4-nitrophenyl)azo]- (9CI) (CA INDEX NAME)

RN 380897-79-0 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[(3-chloro-2-hydroxy-5-nitrophenyl)azo]-5-hydroxy- (9CI) (CA INDEX NAME)

RN 381211-44-5 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[(3-chloro-2-hydroxy-5-nitrophenyl)azo]-5-hydroxy-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

L21 ANSWER 22 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:631863 HCAPLUS

DN 135:185197

ED Entered STN: 31 Aug 2001

Hair dyeing composition containing direct dyes and quaternized dimethyl-or diethylamino alkylmethacrylate polymers

IN Lorenz, Heribert

PA Goldwell G.m.b.H., Germany

SO Eur. Pat. Appl., 9 pp. CODEN: EPXXDW

DT Patent

LA German

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

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DATE APPLICATION NO.
      PATENT NO.
                       KIND DATE
                                                               DATE
                        ____
     EP 1127566
 PΙ
                         A2
                               20010829 EP 2001-100617
                                                                 20010111
      EP 1127566
                         A3 20011219
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
      DE 10007776
                     A1 20010906
                                           DE 2000-10007776
                                                                 20000221
 PRAI DE 2000-10007776
                      Α
                               20000221
 CLASS
  PATENT NO.
              CLASS PATENT FAMILY CLASSIFICATION CODES
  EP 1127566 ICM A61K007-13
     The invention concerns hair dyes that contain a direct dye and quaternized
     dimethyl-or diethylamino alkylmethacrylate polymers, e.g.
     quaternary dimethylaminoethyl homopolymer. Thus a composition contained
     (weight/weight%): dimethicone copolyol 1.50; ethanol 5.00; lactic acid (95%)
     5.00; sodium hydroxide (32%) 0.20; Polyquaternium 37 (50% in propylene
     glycol dicaprate-dicaprylate solution) 3.50; Acid Orange 7 0.15; Acid Yellow
     3 0.10; Acid Violet 43 0.25; water to 100; pH 3.0.
     hair dye quaternized dimethyl diethylamino alkylmethacrylate
     polymer
IT
     Dyes
        (direct; hair dyeing composition containing direct dyes and quaternized
di-Me-or
        diethylamino alkylmethacrylate polymers)
ΙT
     Hair preparations
        (dyes; hair dyeing composition containing direct dyes and quaternized
di-Me-or
        diethylamino alkylmethacrylate polymers)
IT
        (hair dyeing composition containing direct dyes and quaternized di-Me-or
        diethylamino alkylmethacrylate polymers)
IT
     Acrylic polymers, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
        (quaternized dimethyl-or diethylamino alkylmethacrylates;
       hair dyeing composition containing direct dyes and quaternized di-Me-or
       diethylamino alkylmethacrylate polymers)
     633-96-5, Acid Orange 7 4430-18-6, Acid Violet 43 8004-92-0,
TΨ
    C.I. Acid Yellow 3 26161-33-1, Polyquaternium 37
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dyeing composition containing direct dyes
       and quaternized di-Me-or diethylamino alkylmethacrylate
       polymers)
IT
    633-96-5, Acid Orange 7 26161-33-1, Polyquaternium 37
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
    (Uses)
       (hair dyeing composition containing direct dyes
       and quaternized di-Me-or diethylamino alkylmethacrylate
       polymers)
RN
    633-96-5 HCAPLUS
    Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt
CN
    (9CI) (CA INDEX NAME)
```

Na

RN 26161-33-1 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1 CMF C9 H18 N O2 . C1

● cl-

L21 ANSWER 23 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 2001:579235 HCAPLUS

DN 135:141965

ED Entered STN: 10 Aug 2001

TI Hair dyes containing quaternized dimethylamino- or diethylaminoalkyl methacrylate polymers

PA Goldwell G.m.b.H., Germany

SO Ger. Gebrauchsmusterschrift, 18 pp. CODEN: GGXXFR

DT Patent

LA German

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

```
DE 20003105
                        U1
                               20010809
                                           DE 2000-20003105
                                                                 20000221
PRAI DE 2000-20003105
                               20000221
CLASS
 PATENT NO.
               CLASS PATENT FAMILY CLASSIFICATION CODES
  -----
                       DE 20003105 ICM A61K007-13
     The invention concerns water-based hair dyes that contain at least one
     direct dye and at least one quaternized dimethylamino- or
     diethylaminoalkyl methacrylate polymer, the pH is 2-6.5. Thus a
     composition contained (weight/weight%): dimethicone copolyol 1.5; ethanol 5.00;
     propylene carbonate 25.00; lactic acid (90%) 5.0; sodium hydroxyde (32%)
     0.20; Polyquaternium-37 50% in propyleneglycol dicaprate-dicaprylate-
     Trideceth -6 mixture 3.50; Acid Orange 7 0.15; Acid Yellow 3 0.10; Acid
     Violet 43 0.25; water to 100; pH 2.0.
     direct hair dye quaternized diethylamino methacrylate polymer
ST
     633-96-5, Acid Orange 7 2871-01-4, HC red 3 4430-18-6, Acid
ΙT
               8004-92-0, Acid Yellow 3
     Violet 43
                                           24938-91-8, Salcare SC95
     26161-33-1 26381-41-9, basic brown 16 35429-19-7
     , Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-,
     chloride, polymer with 2-propenamide 56932-44-6, HC yellow 5
     68123-13-7, basic blue 99
                              68391-31-1, basic yellow 57
     176742-32-8, basic brown 17
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dyes containing quaternized dimethylamino- or
        diethylaminoalkyl methacrylate polymers)
ΙT
     473664-54-9
     RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
        (hair dyes containing quaternized dimethylamino- or diethylaminoalkyl
       methacrylate polymers)
ΙT
     633-96-5, Acid Orange 7 26161-33-1 26381-41-9,
    basic brown 16 35429-19-7, Ethanaminium, N,N,N-trimethyl-2-[(2-
    methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with \bar{2}-propenamide
     176742-32-8, basic brown 17
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dyes containing quaternized dimethylamino- or
       diethylaminoalkyl methacrylate polymers)
RN
     633-96-5 HCAPLUS
    Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt
CN
     (9CI) (CA INDEX NAME)
```

Na

RN 26161-33-1 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1 CMF C9 H18 N O2 . Cl

● Cl-

RN 26381-41-9 HCAPLUS
CN 2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● cl-

RN 35429-19-7 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 5039-78-1 CMF C9 H18 N O2 . C1

● c1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 176742-32-8 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminonitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

D1-NO2

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ANSWER 24 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
     2001:403400 HCAPLUS
ΑN
DN
     135:9819
     Entered STN: 05 Jun 2001
ED
     Hair dye compositions containing polyacrylates and aromatic
TI
     alcohols or alkylene carbonates
     Tsuge, Tomoji; Kojima, Atsushi
IN
PA
     Hoyu K. K., Japan
     Jpn. Kokai Tokkyo Koho, 9 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM A61K007-13
     ICS C09B067-46
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                       KIND
                              DATE
                                          APPLICATION NO.
                                                                DATE
     -----
                       ____
                              _____
                                          -----
PI
    JP 2001151647
                       A2
                              20010605
                                          JP 1999-337042
                                                                19991129
PRAI JP 1999-337042
                              19991129
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
               _____
 JP 2001151647 ICM
                      A61K007-13
               ICS
                      C09B067-46
    The compns., which show good dyeability, adhesion to the hair, and no
AB
    dripping, contain water-dispersible acrylic acid polymers, aromatic
    alcs. and/or lower alkylene carbonates, and direct dyes. A hair dye was
    prepared from alkyl acrylate copolymer emulsion 10.0, benzyl alc.
    10.0, carboxyvinyl polymer 2.0, EtOH 8.0, Black Number 401 0.3, Purple Number
    401 0.1, Orange Number 205 0.2, lactic acid, and H2O to 100 weight%.
    hair dye direct polyacrylate arom alc; alkylene carbonate
    polyacrylate hair dye direct
    Polyoxyalkylenes, biological studies
    RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
       (acrylic; hair dyes containing polyacrylates and aromatic
       alcs. or alkylene carbonates)
```

IT Polyoxyalkylenes, biological studies
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)

(alkyl ethers, monoitaconates, polymers with alkyl acrylate; hair dyes containing polyacrylates and aromatic alcs. or alkylene carbonates)

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(aralkyl; hair dyes containing polyacrylates and aromatic alcs. or alkylene carbonates)

IT Hair preparations

(dyes; hair dyes containing polyacrylates and aromatic alcs. or alkylene carbonates)

ΙT 79-10-7D, Acrylic acid, alkyl esters, polymers 79-41-4D, Methacrylic acid, alkyl esters, polymers 96-49-1, Ethylene carbonate 99-56-9, p-Nitro-o-phenylenediamine 100-42-5D, Styrene, polymers with alkyl acrylate 100-51-6, Benzyl alcohol, biological studies 108-32-7, Propylene carbonate 128 128-95-0. 1,4-Diaminoanthraquinone 622-08-2, 2-Benzyloxyethanol 633-96-5 , Japan Orange 205 **1064-48-8**, Japan Black 401 4430-18-6, Japan Purple 401 5307-14-2, Nitro-p-phenylenediamine 9005-00-9D, Polyoxyethylene stearyl ether, polymers with alkyl (meth)acrylates 25322-68-3D, Polyethylene glycol, alkyl ethers, monoitaconates, polymers with alkyl acrylate RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dyes containing polyacrylates and aromatic alcs. or alkylene carbonates)

IT 633-96-5, Japan Orange 205 1064-48-8, Japan Black 401 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dyes containing polyacrylates and aromatic alcs. or alkylene carbonates)

RN 633-96-5 HCAPLUS

CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

● Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

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ANSWER 25 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
      1999:686710 HCAPLUS
 DN
      131:291360
 ED
      Entered STN: 28 Oct 1999
      Staining method for removing louse nits from hair
 ΙN
      Reid, Lori Fox; Kross, Robert D.
 PΑ
      USA
 SO
      U.S., 7 pp.
      CODEN: USXXAM
 DT
      Patent
 LA
      English
 IC
      ICM A61K049-00
      ICS A61K033-00; A61K031-61; A61K031-415
NCL
      514407000
      63-8 (Pharmaceuticals)
      Section cross-reference(s): 5, 62
FAN.CNT 1
      PATENT NO.
                          KIND
                                  DATE
                                               APPLICATION NO.
                                                                       DATE
      -----
                           ----
                                  _____
     US 5972987
PΙ
                           Α
                                  19991026
                                               US 1999-270350
                                                                       19990316
     CA 2360888
                           AA
                                  20000921
                                               CA 2000-2360888
     WO 2000054816
                           A1
                                  20000921
                                               WO 2000-US3811
                                                                       20000214
          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
            CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
              IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
              BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
              DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
              CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1161265
                                20011212 EP 2000-911812
                           Α1
                                                                     20000214
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
PRAI US 1999-270350
                           Α
                                  19990316
     WO 2000-US3811
                                  20000214
CLASS
 PATENT NO.
                 CLASS PATENT FAMILY CLASSIFICATION CODES
                 _____
US 5972987
                 ICM
                         A61K049-00
```

ICS A61K033-00; A61K031-61; A61K031-415 NCL 514407000

AB A method for removing louse eggs from the hair of an infested human or animal using a nit-visualizing composition is disclosed. The composition involves

the use of certain dyes which have an affinity to the surface of nits, to thereby enable a second individual to more easily see and remove the eggs during a combing or other removal process. To effectuate this purpose, a colored material is dispersed within a water- or alc.-based solvent and, in one embodiment, a liquefied propellant as well. The composition is applied to the hair of the infested human or animal, and then removed after drying by a process of brushing or washing. However, the colored material which adsorbs to the chitinous exoskeleton and binding cement of the louse eggs remains on the nits, thereby facilitating visual identification and removal of the eggs from hair.

ST louse nit removal hair dye

IT Lanolin

Paraffin oils

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(aerosol spray lubricant; staining method for removing louse nits from hair)

IT Polysiloxanes, uses

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(aerosol spray propellant; staining method for removing louse nits from hair)

IT Sprays

(aerosols; staining method for removing louse nits from hair)

IT Hydrocarbons, uses

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(chlorofluorocarbons, aerosol spray propellant; staining method for removing louse nits from hair)

IT Invertebrate body covering

(exoskeleton, stains specific for; staining method for removing louse nits from hair)

IT Hydrocarbons, uses

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(fluoro, aerosol spray propellant; staining method for removing louse nits from hair)

IT Lubricants

Plasticizers

Propellants (sprays and foams)

Solvents

(for aerosol sprays; staining method for removing louse nits from hair)

IT Aminoplasts

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(for aerosol sprays; staining method for removing louse nits from hair)

IT Louse

(head; staining method for removing louse nits from hair)

IT Egg

(louse; staining method for removing louse nits from hair)

IT Insecticides

(pediculicides; staining method for removing louse nits from hair)

IT Mica-group minerals, uses
RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical

study); USES (Uses) (pigment; staining method for removing louse nits from hair) IT Spray atomizers (pneumatic; staining method for removing louse nits from hair) IT Perfumes Pigments, nonbiological Stains, biological (staining method for removing louse nits from hair) TΨ Polymers, analysis RL: ARU (Analytical role, unclassified); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process) (staining method for removing louse nits from hair) 84-66-2, Diethyl phthalate 110-27-0, Isopropyl myristate TΨ Dioctyl sebacate 9007-48-1, Polyglyceryloleate RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses) (aerosol spray plasticizer; staining method for removing louse nits from hair) ΙT 67-66-3, Chloroform, uses 74-98-6, Propane, uses 75-28-5, Isobutane RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses) (aerosol spray propellant; staining method for removing louse nits from hair) 64-17-5, Ethanol, uses 67-63-0, Isopropyl alcohol, uses 102-71-6, uses 7732-18-5, Water, uses RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses) (aerosol spray solvent; staining method for removing louse nits from hair) 54-64-8, Thimerosal IΤ 129-16-8, Mercurochrome 518-47-8, Disodium fluorescein 519-73-3D, Triphenylmethane, derivs. 633-03-4, Brilliant green 1934-21-0, Tartrazine 2321-07-5, Fluorescein 16423-68-0, 2',4',5',7'-Tetraiodofluorescein disodium salt 28983-56-4, Methyl blue RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process); USES (Uses) (dye; staining method for removing louse nits from ΤT 84-65-1D, Anthraquinone, derivs. 92-83-1D, Xanthene, derivs. 39455-90-8D, Pyrazolone, derivs. RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process); USES (Uses) (dyes; staining method for removing louse nits from hair) IT 9003-05-8, Polyacrylamide 9003-05-8D, Polyacrylamide, methane-sulfonic acid derivs. 9003-08-1 25035-84-1, Polyvinyl propionate 26008-54-8, Vinyl alcoholvinylpyrrolidone copolymer RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses) (for aerosol sprays; staining method for removing louse nits from hair) IT 1332-37-2, Iron oxide, uses 7787-59-9, Bismuth oxychloride 13463-67-7, Titanium dioxide, uses 25869-00-5, Ferric ammonium ferrocyanide RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses) (pigment; staining method for removing louse nits from hair) 67-64-1, 2-Propanone, uses 75-09-2, uses 115-10-6, Dimethyl ether

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical

process); PROC (Process); USES (Uses)

ΤT

(staining method for removing louse nits from hair) 1398-61-4, Chitin

RL: BSU (Biological study, unclassified); BIOL (Biological study) (stains specific for; staining method for removing louse nits from hair)

RE.CNT THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD 8 RE

- (1) Andrews; US 5380756 1995 HCAPLUS
- (2) Bernstein; US 4439427 1984 HCAPLUS
- (3) Bernstein; US 4927813 1990 HCAPLUS
- (4) Cardin; US 5292504 1994 HCAPLUS
- (5) James; US 5681859 1997 HCAPLUS
- (6) Mallis, A; Handbook of Pest Control Sixth Edition 1982, P593
- (7) Sheftel; US 5658750 1997 HCAPLUS
- (8) Upton; US 5547665 1996 HCAPLUS
- 1934-21-0, Tartrazine

RL: ARG (Analytical reagent use); PEP (Physical, engineering or chemical process); ANST (Analytical study); PROC (Process); USES (Uses)

(dye; staining method for removing louse nits from hair)

1934-21-0 HCAPLUS RN

ΙT

1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-CN sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

IT 9003-05-8, Polyacrylamide 9003-05-8D,

Polyacrylamide, methane-sulfonic acid derivs.

RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(for aerosol sprays; staining method for removing louse nits from hair)

9003-05-8 HCAPLUS RN

2-Propenamide, homopolymer (9CI) (CA INDEX NAME) CN

CM1

CRN 79-06-1 CMF C3 H5 N O

```
H_2N-C-CH=CH_2
 RN
      9003-05-8 HCAPLUS
 CN
      2-Propenamide, homopolymer (9CI) (CA INDEX NAME)
      CM
      CRN 79-06-1
      CMF C3 H5 N O
     0
 H2N-C-CH=CH2
L21 ANSWER 26 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
     1999:296972 HCAPLUS
 DN
     131:9443
 ΕD
     Entered STN: 14 May 1999
 ΤI
     Hair dyes containing amphoteric polymers
 ΙN
     Takahashi, Toshinobu; Kurita, Nobuyuki
     Shiseido Co., Ltd., Japan
 PA
     Jpn. Kokai Tokkyo Koho, 19 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
TC
     ICM A61K007-06
     ICS A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                         KIND
                                           APPLICATION NO.
                                DATE
     ______
                         ----
                                            ______
PΤ
     JP 11124319
                         A2
                                19990511
                                            JP 1997-306441
PRAI JP 1997-306441
                                19971020
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
 -----
                _____
 JP 11124319
                 ICM
                       A61K007-06
                 ICS
                       A61K007-13
     Hair dyes which provide improved coloring capability, stability, and water
AΒ
     resistance with little color transfers, comprise (1) amphoteric polymers,
     (2) acidic dyes, and (3) pigments. The dye compns. may further contain a foaming agent, ethanol, and water. A hair mousse contained an amphoteric
     copolymer, i.e. [CH2=CMeCO2C2H4N+Me2CH2CO2-]x[CH2=CMeCO2C17H35]y[CH2=CMeCO
     2C4H9]z (mol. weight 200,000) 6, naphthol blue black 0.1, naphthol yellow S
     0.2, orange II 0.04, acid fuchsine D 0.15, carbon black 1, glycerin 1,
     dimethylpolysiloxane 3, polyoxyethylene hydrogenated castor oils 3,
    ethanol 20, perfumes q.s, LPG 8, and deionized water q.s. to 100 %.
    hair acidic dye amphoteric polymer
ST
ΙT
    Hair preparations
       (dyes; hair dyes containing amphoteric polymers and acidic dyes and
       pigments)
```

IT Hair preparations

(gels; hair dyes containing amphoteric polymers and acidic dyes and pigments)

IT Carbon black, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dyes containing amphoteric polymers and acidic dyes and pigments)

IT Hair preparations

(mousses; hair dyes containing amphoteric polymers and acidic dyes and pigments)

IT Hair preparations

(sprays; hair dyes containing amphoteric polymers and acidic dyes and pigments)

IT 633-96-5, Orange II 846-70-8, Naphthol yellow S 1064-48-8, Naphthol blue black 1332-37-2, Iron oxide, biological studies 3567-66-6, Acid fuchsine D 212832-26-3 225366-96-1 225366-97-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dyes containing amphoteric polymers and acidic dyes and pigments)

IT 633-96-5, Orange II 1064-48-8, Naphthol blue black 3567-66-6, Acid fuchsine D 212832-26-3

225366-96-1 225366-97-2

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dyes containing amphoteric polymers and acidic dyes and pigments)

RN 633-96-5 HCAPLUS

CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

ELHILO 09/663942 8/20/04 Page 93

●2 Na

RN 3567-66-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-amino-4-hydroxy-3-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 212832-26-3 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-N, N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with heptadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 62723-61-9 CMF C10 H17 N O4

CM 2

CRN 6140-75-6 CMF C21 H40 O2

$$$^{\rm O}_{\rm CH_2}$$$
 Me $^-$ (CH2) $_{16}^{\rm TO}$ O $^-$ C $^-$ Me

RN 225366-96-1 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with butyl 2-methyl-2-propenoate and heptadecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 62723-61-9 CMF C10 H17 N O4

CM 2

CRN 6140-75-6 CMF C21 H40 O2

$$$^{\rm O}_{\rm CH_2}$$$
 Me- (CH2)16-O-C-C-Me

CM 3

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c} \text{O } \text{CH}_2 \\ \parallel \quad \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

RN 225366-97-2 HCAPLUS

CN 1-Propanaminium, N-(2-carboxyethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)oxy]-, inner salt, polymer with butyl 2-propenoate and heptadecyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 155559-37-8 CMF C11 H19 N O4

$$\begin{array}{c|c} & \text{Me} & \text{O} \\ & \downarrow & \text{II} \\ -\text{O}_2\text{C}-\text{CH}_2-\text{CH}_2-\text{N} & \text{(CH}_2)_3-\text{O}-\text{C}-\text{CH} \\ & \downarrow & \text{Me} \end{array}$$

CM 2

CRN 28343-58-0 CMF C20 H38 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{Me-} \text{(CH}_2)_{16} - \text{O-} \text{C-} \text{CH} \Longrightarrow \text{CH}_2 \end{array}$$

CM 3

CRN 141-32-2 CMF C7 H12 O2

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{n-BuO-C-CH----} \text{CH}_2 \end{array}$$

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L21 ANSWER 27 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
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AN 1998:693025 HCAPLUS

DN 130:17080

ED Entered STN: 02 Nov 1998

TI Semi-permanent hair dyes

IN Kojima, Atsushi

PA Hoyu K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10287535 JP 1997-113500	A2	19981027 19970414	JP 1997-113500	19970414

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

JP 10287535 ICM A61K007-13

AB Semi-permanent hair dyes showing appropriate hair dyeing and conditioning effects contain: [a] arom alcs., [b] cationic compds., [c] water-soluble anionic polymers, [d] direct dyes and [e] carboxylic acids.

ST semipermanent hair dye alc cationic compd; anionic compd semipermanent hair dye

IT Polyelectrolytes

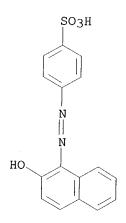
(anionic, water-soluble; semipermanent hair dyes)

IT Alcohols, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(aralkyl; semipermanent hair dyes)

Polyelectrolytes (cationic; semipermanent hair dyes) ΙT (direct; semipermanent hair dyes) ΙT Hair preparations (dyes; semipermanent hair dyes) ΙT Acrylic polymers, biological studies Carboxylic acids, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (semipermanent hair dyes) IT9004-34-6D, Cellulose, derivs., biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (cationic; semipermanent hair dyes) IT 50-21-5, Lactic acid, biological studies 100-51-6, Benzenemethanol, biological studies 112-03-8, Stearyltrimethylammonium chloride 633-96-5, Japan orange 205 7398-69-8, Dimethyldiallylammonium chloride 9003-04-7, Polyacrylic acid sodium salt 9004-32-4 9004-62-0, Hydroxyethyl cellulose **25549-84-2**, Polyacrylic acid sodium salt 92183-41-0 142905-80-4 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (semipermanent hair dyes) ΙT 633-96-5, Japan orange 205 9003-04-7, Polyacrylic acid sodium salt 25549-84-2, Polyacrylic acid sodium salt RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (semipermanent hair dyes) RN 633-96-5 HCAPLUS Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt CN (9CI) (CA INDEX NAME)



Na

RN 9003-04-7 HCAPLUS CN 2-Propenoic acid, homopolymer, sodium salt (9CI) (CA INDEX NAME) CM 1

CRN 9003-01-4 CMF (C3 H4 O2)x

CCI PMS

CM 2

CRN 79-10-7 CMF C3 H4 O2

RN 25549-84-2 HCAPLUS

CN 2-Propenoic acid, sodium salt, homopolymer (9CI) (CA INDEX NAME)

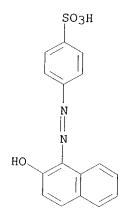
CM 1

CRN 7446-81-3 CMF C3 H4 O2 . Na

● Na

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L21 ANSWER 28 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
    1998:516316 HCAPLUS
DN
    129:152988
ED
    Entered STN: 19 Aug 1998
TΙ
    Acidic hair dye compositions
IN
    Shisui, Ayako; Nakano, Koji
PΑ
    Yamahatsu Sangyo Kaisha, Ltd., Japan
SO
    Jpn. Kokai Tokkyo Koho, 7 pp.
    CODEN: JKXXAF
DT
    Patent
    Japanese
LA
IC
    ICM A61K007-13
    62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
    PATENT NO.
                    KIND
                          DATE
                                   APPLICATION NO.
                                                       DATE
    -----
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                          -----
                                    -----
    JP 10212219
                          19980811
                    A2
                                    JP 1997-18501
                                                       19970131
    JP 3072506
                    B2
                          20000731
PRAI JP 1997-18501
                          19970131
CLASS
PATENT NO.
             CLASS PATENT FAMILY CLASSIFICATION CODES
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             _____
JP 10212219
             ICM A61K007-13
```

Acidic dye compns. showing excellent dyeing, wash-resistant and AΒ dye-adhering effects contain: [A] acrylic acid-alkyl acrylate copolymer, [B] alcs., and [C] acid dyes. ST acidic hair dye acrylic copolymer alc ΙT (acid; acidic hair dye compns.) ΙŢ Acrylic polymers, biological studies Alcohols, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (acidic hair dye compns.) IT Hair preparations (dyes, acidic; acidic hair dye compns.) 64-17-5, Ethanol, biological studies 100-51-6, Benzyl alcohol, ΙT biological studies 633-96-5, Japan orange 205 176429-87-1, Carbopol etd 2020 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (acidic hair dye compns.) IT **633-96-5**, Japan orange 205 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (acidic hair dye compns.) RN 633-96-5 HCAPLUS Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt CN (9CI) (CA INDEX NAME)



Na

L21 ANSWER 29 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN AN 1997:803593 HCAPLUS DN 128:92988 ED Entered STN: 25 Dec 1997 TIHair dye compositions Aoki, Kunihito; Morita, Kenichi; Kawaguchi, Shigetaka IN Nonogawa Shoji Y. K., Japan PΑ SO Jpn. Kokai Tokkyo Koho, 4 pp. CODEN: JKXXAF

DTPatent LA Japanese IC ICM A61K007-13 62-3 (Essential Oils and Cosmetics) CC FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE -----PΙ JP 09323921 A2 19971216 JP 1996-184308 19960531 JP 3476623 B2 20031210 PRAI JP 1996-184308 19960531 CLASS PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES JP 09323921 ICM A61K007-13 Hair dye compns. showing excellent dyeing and wash-resistant properties AΒ and stability comprise: (A) methacrylic acid-alkyl methacrylate copolymers, (B) benzyl alc., n-butanol or other monohydric alcs., (C) acids and (D) acid dyes [final pH = 1.5-4.5]. ST Hair dye acrylic copolymer alc IΤ Dyes (acid; hair dye compns.) ΙT Hair preparations (dyes; hair dye compns.) ΙT Acids, biological studies Alcohols, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (hair dye compns.) 50-21-5, Lactic acid, biological studies 71-36-3D, n-Butanol, alkyl IT methacrylate copolymer 79-41-4D, Methacrylic acid, alkyl, copolymers with methacrylic acid 79-41-4D, Methacrylic acid, copolymers with methacrylic acid 100-51-6, Benzyl alcohol, biological studies 108-93-0, Cyclohexanol, biological studies 122-99-6, Phenoxyethanol 622-08-2, 2-Benzyloxyethanol 1064-48-8, Japan black 401 RL: BUŪ (Biological use, unclassified); BIOL (Biological study); USES (Uses) (hair dye compns.) ΙT 1064-48-8, Japan black 401 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses) (hair dye compns.) RN 1064-48-8 HCAPLUS 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

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L21
      ANSWER 30 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
 ΑN
      1997:433152 HCAPLUS
 DN
      127:55628
 ED
      Entered STN: 11 Jul 1997
      Hair dyeing compositions containing acid dyes
 TI
 IN
      Segawa, Hirotsugu; Nakatani, Yasuaki
 PΑ
      Takara Belmont Co., Ltd., Japan
 SO
      Jpn. Kokai Tokkyo Koho, 4 pp.
      CODEN: JKXXAF
 DΤ
      Patent
 LA
      Japanese
 IC
      ICM A61K007-13
      62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1
      PATENT-NO. KIND DATE APPLICATION NO.
                                                                   DATE
      ---------
                                             -----
                                 -----
      JP 09124450
 PΙ
                                 19970513
                          A2
                                             JP 1995-285734
                                                                    19951102
      JP 3243401
                           B2
                                 20020107
 PRAI JP 1995-285734
                                19951102
  PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
  _____ ____
                        JP 09124450
                ICM
                        A61K007-13
     Hair dyeing compns. contain water-soluble acid dyes, water-soluble polymers
     chosen from amphoteric polymers and cationic polymers containing 0.5-6.0\% (as
     solid) N+, Fe compds., organic solvents, and water. The compns. show good
     colorfastness and give no damage to hair. A hair dye was formulated
     containing Merquat Plus 3330 (amphoteric polymer), FeCl3, PhCH2OH, EtOH, Japan Black 401, Japan Purple 401, Japan Orange 205, and water.
ST
     acid dye hair amphoteric cationic polymer; iron chloride hair dye
     amphoteric polymer
IΤ
     Dyes
        (acid; hair dyes containing acid dyes, amphoteric or cationic polymers, and
        iron compds. giving no damage to hair)
ΤТ
     Polyelectrolytes
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (amphoteric; hair dyes containing acid dyes, amphoteric or cationic
        polymers, and iron compds. giving no damage to hair)
ΙT
     Hair preparations
        (dyes; hair dyes containing acid dyes, amphoteric or cationic polymers, and
        iron compds. giving no damage to hair)
TT
     Quaternary ammonium compounds, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (polymers; hair dyes containing acid dyes, amphoteric or cationic polymers,
        and iron compds. giving no damage to hair)
     633-96-5, Japan Orange 205 1064-48-8, Japan Black 401
     4430-18-6, Japan Purple 401 7705-08-0, Ferric chloride, biological
     studies 25136-75-8, Merquat Plus 3330 26590-05-6,
     Merquat 550
                 159520-13-5, Leogard MGP 190976-47-7, Yukaformer W
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dyes containing acid dyes, amphoteric
       or cationic polymers, and iron compds. giving no damage to hair
     633-96-5, Japan Orange 205 1064-48-8, Japan Black 401
ΤŢ
     25136-75-8, Merquat Plus 3330 26590-05-6, Merquat 550
```

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dyes containing acid dyes, amphoteric
or cationic polymers, and iron compds. giving no damage to hair
)

RN 633-96-5 HCAPLUS

CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 25136-75-8 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ | \\ | \\ \text{CH-CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH-CH}_2 \\ | \\ \text{Me} \end{array}$$

● Cl-

CM 2

CRN 79-10-7 CMF C3 H4 O2

$$\begin{matrix} \text{O} \\ || \\ \text{HO-C-CH} = \text{CH}_2 \end{matrix}$$

CM 3

CRN 79-06-1 CMF C3 H5 N O

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} & = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{+} \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

● C1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

0 H2N-C-CH=CH2

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L21 ANSWER 31 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
```

ΑN 1996:641226 HCAPLUS

DN 125:284339

ED Entered STN: 31 Oct 1996

Aerosols containing acidic semipermanent hair dyes and other ingredients in a double-layered container

IN Yoshihara, Toru; Kawase, Jiro

PΑ

Kao Corp., Japan Jpn. Kokai Tokkyo Koho, 27 pp. SO CODEN: JKXXAF

DT Patent

LAJapanese

IC ICM A61K007-13 ICS A61K007-00

62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

1	PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
	JP 08198734 JP 11130640	•	A2 A2	19960806 19990518	JP 1995-225811 JP 1998-222377	19950809
Ç	JP 1994-315 JP 1994-315	789		19941125 19941125		19950809
CLASS	JP 1995-225	811		19950809		
PATE	NT NO.	CLASS	PATENT	FAMILY CLASS	SIFICATION CODES	

----------JP 08198734 ICM

A61K007-13 ICS A61K007-00

Aerosols containing acidic semipermanent hair dye compns. comprising e.g. AΒ ethanol 20, xanthane gum 1,0, black color number 401 0.02, purple color number 401 0.02, orange color number 205 0.09 benzyl alc. 10.0, glycolic acid 3.0, and NaOH and purified water to 100 weight% in a double-layered container (diagrammatic views given) are claimed. Acidic semipermanent hair dye compns. in the double-layered container showed storage-stability.

STaerosol acidic semipermanent hair dye container

ΤТ

(aerosols containing acidic semipermanent hair dyes and other ingredients in a double-layered container)

TΤ Polyamides, uses

RL: NUU (Other use, unclassified); USES (Uses)

(in preparing a double-layered container for aerosols containing acidic semipermanent hair dyes and other ingredients)

ΙT Petroleum gases, liquefied

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(propellant; aerosols containing acidic semipermanent hair dyes and other ingredients in a double-layered container)

ΙT Hair preparations (dyes, acidic semipermanent; aerosols containing acidic semipermanent hair dyes and other ingredients in a double-layered container)

IT Hair preparations

(sprays, aerosols containing acidic semipermanent hair dyes and other ingredients in a double-layered container)

Trystaddistrict in a double layered container,

50-21-5, Lactic acid, biological studies 77-92-9, Citric acid, biological studies 79-14-1, Glycolic acid, biological studies 100-51-6, Benzyl alcohol, biological studies 633-96-5

872-50-4, N-Methylpyrrolidone, biological studies 1064-48-8

1569-02-4 4430-18-6

(aerosols containing acidic semipermanent hair dyes and other ingredients in a double-layered container)

TT 9002-88-4, Polyethylene 9003-07-0, Polypropylene 25014-41-9, Polyacrylonitrile 25067-34-9, Ethylene-vinyl alcohol copolymer 25610-19-9, Polyethylene phthalate

RL: NUU (Other use, unclassified); USES (Uses)

(in preparing a double-layered container for aerosols containing acidic semipermanent hair dyes and other ingredients)

IT 115-10-6, Dimethyl ether

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(propellant; aerosols containing acidic semipermanent hair dyes and other ingredients in a double-layered container)

IT 633-96-5 1064-48-8

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(aerosols containing acidic semipermanent hair dyes and other ingredients in a double-layered container)

RN 633-96-5 HCAPLUS

CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

ΙT 25014-41-9, Polyacrylonitrile

RL: NUU (Other use, unclassified); USES (Uses) (in preparing a double-layered container for aerosols containing acidic semipermanent hair dyes and other ingredients)

25014-41-9 HCAPLUS RN

2-Propenenitrile, homopolymer (9CI) (CA INDEX NAME) CN

CM 1

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

ANSWER 32 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN L21

ΑN 1996:521131 HCAPLUS

DN 125:150746

ED Entered STN: 30 Aug 1996

ΤI Hair dyes

ΙN Kuroda, Goro

Chuo Eazooru Kagaku Kk, Japan PΑ

Jpn. Kokai Tokkyo Koho, 7 pp. SO

CODEN: JKXXAF

DTPatent

LA Japanese

ICICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI PRAI CLAS	JP 08143434 JP 3074443 JP 1994-285449 S	A2 B2	19960604 20000807 19941118	JP 1994-285449	19941118

CLASS PATENT FAMILY CLASSIFICATION CODES -----______ ____ JP 08143434 ICM

Hair dyes comprise noncolored powders (e.g. kaolin) 10-50, coloring agents 0.2-10, and sticking agents 2-30 weight% with/without water, solvents, stabilizers, surfactants, moisturizers and other substances. In a hair dye spray, 100 parts of the solution is mixed with 8-180 parts of propellants. A hair dye contained castor oil 3.0, liquid paraffin 3.5, POE

A61K007-13

```
lauryl ether phosphate 12.0, Na POE lauryl ether phosphate 2.0, silicic
     acid 4.0, kaolin 20.0, cacao color 2.0, caramel 11.0, 40% acrylic
     resin alkanoilamine 12.0, phenoxyethanol 0.4, perfumes 0.1, and purified
     water 30.0 weight%. Hair dyes firmly adhered to hair after treatment.
ST
      hair dye kaolin colorant
ΙT
     Cocoa (Theobroma cacao)
         (color; hair dyes)
IT
     Caramel (color)
     Dyes
         (hair dyes)
     Carbon black, biological studies
IT
     Kaolin, biological studies
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dyes)
ΙT
     Silk
        (powder; hair dyes)
IT
     Hair preparations
        (dyes, hair dyes)
IT
     Hair preparations
        (sprays, hair dyes)
ΙT
     81-48-1 523-44-4 1064-48-8 1320-07-6
                                               7720-78-7
     14807-96-6, Talc, biological studies
                                            15876-39-8
                                                          25086-89-9,
     Vinylpyrrolidone-vinyl acetate copolymer
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dyes)
IT
     523-44-4 1064-48-8
     RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
     (Uses)
        (hair dyes)
     523-44-4 HCAPLUS
RN
     Benzenesulfonic acid, 4-[(4-hydroxy-1-naphthalenyl)azo]-, monosodium salt
CN
     (9CI) (CA INDEX NAME)
```

● Na

RN1064-48-8 HCAPLUS

2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-CN(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

D2 Na

L21 ANSWER 33 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

1996:376927 HCAPLUS ΑN

DN 125:41439

ED Entered STN: 28 Jun 1996

Cleansing compositions containing sulfonate anionic surfactants and acidic TΙ dyes for hair

ΙN Matsushita, Yukiko; Amari, Jun

PΑ Shiseido Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 8 pp. CODEN: JKXXAF

DT Patent

LA Japanese

ICM A61K007-075 IC

ICS A61K007-13; C11D001-12; C11D001-14; C11D003-40

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 08092042 PRAI JP 1994-249992 CLASS	A2	19960409 19940919	JP 1994-249992	19940919

CLASS PATENT FAMILY CLASSIFICATION CODES ______ ______ JP 08092042 ICM A61K007-075

> A61K007-13; C11D001-12; C11D001-14; C11D003-40 ICS

AΒ The title compns., which show high cleansability and foamability at low pH, hair-dyeing effect, and no irritation, contain 5.0-50.0 weight% sulfonate anionic surfactants and 0.02-1.0 weight% acidic dyes and have pH 1.5-4.5. A shampoo was prepared from α -olefin Na sulfonate 10.0, maltitol hydroxyalkyl ether 2.0, polyoxyethylene-polyoxypropylene block copolymer 1.0, Orange Number 205 0.03, Purple Number 401 0.01, Black Number 401 0.02,

benzyl

alc. 15.0, dimethyldiallylammonium chloride-acrylamide copolymer, citric acid 3.0, perfume, and H2O to 100 weight%.

cleansing hair sulfonate anionic surfactant; acidic dye cleansing hair ST anionic surfactant

ΙT Shampoos

> (cleansing compns. containing sulfonate anionic surfactants and acidic dyes for hair)

ΙT Sulfonic acids, biological studies RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(1-alkene, sodium salts, cleansing compns. containing sulfonate anionic surfactants and acidic dyes for hair)

IT Surfactants

(anionic, cleansing compns. containing sulfonate anionic surfactants and acidic dyes for hair)

IT Amides, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(coco, N-sulfoethyl, salts; cleansing compns. containing sulfonate anionic surfactants and acidic dyes for hair)

IT 107-68-6D, Methyltaurine, N-cocoyl derivs., salts 633-96-5,

Japan Orange 205 1064-48-8, Japan Black 401 1934-21-0,

Japan Yellow 4 4430-18-6, Japan Purple 401

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cleansing compns. containing sulfonate anionic surfactants and acidic dyes for hair)

IT 100-51-6, Benzyl alcohol, biological studies 872-50-4, N-Methyl-2-pyrrolidone, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(dye fixer; cleansing compns. containing sulfonate anionic surfactants and acidic dyes for hair)

IT 633-96-5, Japan Orange 205 1064-48-8, Japan Black 401 1934-21-0, Japan Yellow 4

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(cleansing compns. containing sulfonate anionic surfactants and acidic dyes for hair)

RN 633-96-5 HCAPLUS

CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

L21 ANSWER 34 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:831813 HCAPLUS

DN 123:296214

ED Entered STN: 04 Oct 1995

TI The characterization of treated and dyed hair

AU Guthrie, J. T.; Kazlauciunas, A.; Rongong, L.; Rush, S.

CS Dep. Colour Chem. Dyeing, Univ. Leeds, Leeds, LS2 9JT, UK

SO Dyes and Pigments (1995), 29(1), 23-44 CODEN: DYPIDX; ISSN: 0143-7208

PB Elsevier

DT Journal

LA English

CC 62-3 (Essential Oils and Cosmetics)

AB Studies have been undertaken to evaluate some of the factors that influence the dyeing of hair with dyes from the Arianor series. Dyed, bleached and untreated hair was examined by DTA, optical microscopy, SEM, X-ray diffractometry and surface potential assessment. It has been found

that marked changes in surface potentials arise on relatively mild treatment of human hair. Also clear are changes in the accessibility of the hair to dyes on treatment with various cosmetic systems. These changes have a marked influence on the nature of the dyeing process and on the hair/dye composite.

ST hair dye prepn Arianor

IT Hair preparations

(dyes, characterization of treated and dyed hair)

112-02-7, Genamin ctac 1643-20-5, Empigen ob **26381-41-9**, Arianor mahogany **55008-57-6**, Gafquat 755n 68123-13-7, Arianor steel blue

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(characterization of treated and dyed hair)

IT 26381-41-9, Arianor mahogany 55008-57-6, Gafquat 755n
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(characterization of treated and dyed hair)

RN 26381-41-9 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● C1-

RN 55008-57-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with dimethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 77-78-1 CMF C2 H6 O4 S

CM 2

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O) \times

CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N-CH}_2 - \text{CH}_2 - \text{O-C-C-Me} \end{array}$$

CM 4

CRN 88-12-0 CMF C6 H9 N O

L21 ANSWER 35 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1995:267005 HCAPLUS

DN 122:33536

ED Entered STN: 01 Jan 1995

Pyridine azo dyes and means for hair dyeing

IN Loewe, Isolde; Clausen, Thomas; Balzer, Wolfgang R.

PA Wella AG, Germany

SO Ger. Offen., 9 pp.

CODEN: GWXXBX

DT Patent

TΙ

LA German

IC ICM C09B029-09

ICS C09B029-42; A61K007-13

ICA C09B051-00; C09B001-22; C09B001-28; C09B011-12; C09B029-16

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

Section cross-reference(s): 62

FAN.CNT 1

	PATENT NO.		KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 4241173 EP 601302 EP 601302 R: DE,		A1 A1 B1 , GB, IT	19940609 19940615 19960710	DE 1992-4241173 EP 1993-116213	19921207 19931007
	ES 2056761 JP 06207114 JP 3510655	Į.	T3 A2 B2	19961116 19940726 20040329	ES 1993-116213 JP 1993-338793	19931007 19931201
PRA:	BR 9304968 JP 20041073 DE 1992-424 JP 1993-338	54 1173	4.4	19940621 20040408 19921207 19931201	BR 1993-4968 JP 2003-403936	19931207 20031203
CLAS PA					IFICATION CODES	
DE	4241173	ICM ICS ICA	C09B029- C09B029- C09B051- C09B029-	-42; A61K007 -00; C09B001	-13 -22; C09B001-28; C09B01	1-12;
JP	2004107354		4C083/AE 4C083/AE 4C083/AE 4C083/AE 4C083/DE 4H057/AA 4H057/CA	3082; 4C083/ 2552; 4C083/ 2011; 4C083/ 2321; 4C083/ 27; 4C083/D 201; 4H057/A 229; 4H057/C	AC072; 4C083/AC102; 4C08 AC781; 4C083/AC851; 4C08 AD071; 4C083/AD091; 4C08 BB21; 4C083/CC36; 4C083/AD091; 4C0	83/AC852; 83/AD131; /DD08; EE26; CA12;
OS GI	MARPAT 122:	33536	111007700	70, 4105//C	CO2; 4H057/DA01; 4H057/I	DA21

$$R^{1}$$
 $N = N - N - N (CH_{2}CH_{2}OH)_{2}$
 R^{2}
 $N = N - N - NH_{2}$
 $H_{2}N$
 $N = N - NH_{2}$

Hair dyeing compns. contain I (R1 = NH2, C1-6-alkylamino, AB C2-4-hyroxyalkylamino) or II (R2 = H, NH2; C1-6-alkylamino, C2-4-hyroxyalkylamino). The dyes are more acid resistant than known azo dyes. Thus, 2-acetamido-5-aminopyridine-N-phenyldiethanolamine was prepared and deacetylated to give I (R1 = NH2) and incorporated into a hair-dyeing composition which showed color change after acid treatment 3.9, compared to 14.5 for 4-amino-4'-[bis(2-hydroxyethyl)amino]azobenzene. ST pyridine azo dye hair IT Hair (hair-dyeing compns. and preparation of pyridine azo dyes therefor) ΙT Dyes, azo (preparation of pyridine azo dyes for hair) 96-91-3 128-95-0, 1,4-Diaminoanthraquinone 632-99-5, C.I. Basic Violet ΙΤ 1220-94-6, C.I. Disperse Violet 4 2475-45-8, 1,4,5,8-

```
Tetraaminoanthraquinone
                                3248-91-7, C.I. Basic Violet 2
                                                                 5307-14-2,
      2-Nitro-1,4-phenylenediamine 5858-51-5, C.I. Acid Brown 4
      6358-09-4, 2-Amino-6-chloro-4-nitrophenol
                                                  8004-87-3, C.I. Basic Violet 1
      24905-87-1
                  27080-42-8
                               29705-39-3
                                             33229-34-4
                                                          56932-44-6
      65235-31-6
                  84041-77-0
                               86722-66-9
                                             95576-89-9
                                                          99610-72-7
     99788-75-7
                  100418-33-5
                                104226-19-9
                                               104333-00-8
                                                             104516-93-0
     114087-41-1
                   159947-25-8
     RL: TEM (Technical or engineered material use); USES (Uses)
         (hair-dyeing compns. containing azo and other
        dves)
ΙT
     28365-08-4
     RL: TEM (Technical or engineered material use); USES (Uses)
        (hair-dyeing compns. containing azo pyridine dyes)
IΤ
     9012-76-4, Chitosan
     RL: MOA (Modifier or additive use); USES (Uses)
        (hair-dyeing compns. containing azo pyridine dyes and polymeric materials)
     9002-89-5 9003-01-4, Poly(acrylic acid)
IT
                                               9003-20-7
     9003-39-8, Poly(vinylpyrrolidone) 25014-41-9 25087-26-7
     , Poly(methacrylic acid)
     RL: MOA (Modifier or additive use); USES (Uses)
        (hair-dyeing compns. containing azo pyridine dyes and polymers)
TΨ
     159947-20-3P
                   159947-21-4P
                                  159947-26-9P
                                                 159947-27-0P
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; preparation of pyridine azo dyes for hair)
ΙT
     159947-22-5P
                   159947-23-6P
                                  159947-24-7P
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (preparation of azo pyridine dyes for hair)
     120-07-0, N-Phenyldiethanolamine 541-41-3, Ethyl chloroformate
IT
                 25948-12-3 29958-14-3, 2-Acetamido-5-aminopyridine
     4093-89-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (starting material; preparation of pyridine azo dyes for hair)
     5858-51-5, C.I. Acid Brown 4
ΙT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (hair-dyeing compns. containing azo and other
        dyes)
RN
     5858-51-5 HCAPLUS
     1-Naphthalenesulfonic acid, 6-[(4-aminophenyl)azo]-5-hydroxy-, monosodium
CN
     salt (9CI) (CA INDEX NAME)
```

● Na

IT 9003-01-4, Poly(acrylic acid) 25014-41-9
25087-26-7, Poly(methacrylic acid)
RL: MOA (Modifier or additive use); USES (Uses)

```
ELHILO 09/663942 8/20/04 Page 114
         (hair-dyeing compns. containing azo pyridine dyes and polymers)
 RN
      9003-01-4 HCAPLUS
      2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)
 CN
      CM
      CRN 79-10-7
      CMF C3 H4 O2
    0
 HO-C-CH-CH2
      25014-41-9 HCAPLUS
 RN
 CN
      2-Propenenitrile, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN 107-13-1
     CMF C3 H3 N
H_2C = CH - C = N
RN
     25087-26-7 HCAPLUS
CN
     2-Propenoic acid, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
          1
     CRN 79-41-4
     CMF C4 H6 O2
    CH<sub>2</sub>
Me-C-CO_2H
L21 ANSWER 36 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
AN 1994:307076 HCAPLUS
DN
    120:307076
ED
    Entered STN: 11 Jun 1994
TΙ
    Clear leave-on hair treatment compositions
    Hoshowski, Myra Ann
IN
PΑ
    Helene Curtis, Inc., USA
SO
     Eur. Pat. Appl., 20 pp.
    CODEN: EPXXDW
DT
    Patent
LA
    English
IC
    ICM A61K007-00
    ICS A61K007-13; A61K007-42
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 2
```

KIND

DATE

APPLICATION NO.

PATENT NO.

```
EP 590538
 PI
                          A1 19940406
                                            EP 1993-115468
                                                                     19930924
      EP 590538
                          B1
                                19961127
          R: DE, DK, ES, FR, GB, IT, SE
 US 6048520 A 20000411
PRAI US 1992-950825 A 19920924
US 1993-105008 A 19930811
                                              US 1993-105008
                                                                     19930811
 CLASS
  PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
  EP 590538 ICM A61K007-00
                  ICS A61K007-13; A61K007-42
 US 6048520
                 ECLA A61K007/00M4
     A transparent leave-on hair treatment composition comprises capsules of a
      water-insol. hair-treating compound encased in a shell material, such as
      gelatin or acacia gum. The aqueous leave-on composition is applied to the
 hair and
      the water-insol. hair-treating compound is released from the capsules to
      treat the hair. The shell disintegrates into sufficiently small residual
      particles such that the phys. and aesthetic properties of the hair are
      retained. Thus, a styling gel contained encapsulated dimethicone
      (Arcapsule MP912) 1.75, Carbopol-940 0.40, triethanolamine 0.55, tetra-Na
     EDTA 0.04, PVA-VA copolymer 4.10, nonoxynol-10 0.10, fragrance 0.05,
     preservative 0.45, and soft water to 10\overline{0.00}%.
ST
     hair conditioner leave on encapsulated siloxane
IT
     Protein hydrolyzates
     RL: BIOL (Biological study)
        (Et esters, encapsulated, leave-on hair conditioners containing)
ΙT
     Keratins
     Paraffin oils
     Safflower oil
     RL: BIOL (Biological study)
         (encapsulated, leave-on hair conditioners containing)
IT
     Molasses
       Acrylic polymers, biological studies
     Albumins, biological studies
     Fats and Glyceridic oils
     Gelatins, biological studies
     Polyamides, biological studies
     Polycarbonates, biological studies
     Polyesters, biological studies
     Polyimides, biological studies
     Shellac
     Waxes and Waxy substances
     RL: BIOL (Biological study)
        (hair-conditioning agent encapsulation by, in manufacture of leave-on hair
        preparation)
IT
     Fatty acids, biological studies
     RL: BIOL (Biological study)
        (polyhydroxy, encapsulated, leave-on hair conditioners containing)
ΙT
     Milk
        (solids, hair-conditioning agent encapsulation by, in manufacture of
        leave-on hair preparation)
     Alcohols, biological studies
TT
     RL: BIOL (Biological study)
        (C16-18, encapsulated, leave-on hair conditioners containing)
ΤT
     Alcohols, compounds
     RL: BIOL (Biological study)
        (C16-18, ethoxylated, encapsulated, leave-on hair conditioners containing)
```

```
TΤ
      Fats and Glyceridic oils
      RL: BIOL (Biological study)
         (almond, encapsulated, leave-on hair conditioners containing)
 ΙT
      Siloxanes and Silicones, biological studies
      RL: BIOL (Biological study)
         (amino, encapsulated, leave-on hair conditioners containing)
 ΙT
      Fats and Glyceridic oils
      RL: BIOL (Biological study)
         (apricot kernel, encapsulated, leave-on hair conditioners containing)
 ΙT
      Fats and Glyceridic oils
      RL: BIOL (Biological study)
         (avocado, encapsulated, leave-on hair conditioners containing)
 ΙT
      Hair preparations
         (conditioners, leave-on, encapsulated conditioning agents in)
      Siloxanes and Silicones, biological studies
      RL: PREP (Preparation)
         (di-Me, hair-conditioning agent encapsulation by, in manufacture of leave-on
         hair preparation)
 ΙT
      Hair preparations
         (dyes, leave-on, encapsulated water-insol. dyes in)
 IT
      Fats and Glyceridic oils
      RL: BIOL (Biological study)
         (grape seed, encapsulated, leave-on hair conditioners containing)
ΙT
     Castor oil
     Tallow
     RL: PREP (Preparation)
         (hydrogenated, hair-conditioning agent encapsulation by, in manufacture of
         leave-on hair preparation)
TΨ
     Collagens, compounds
     Keratins
     RL: BIOL (Biological study)
         (hydrolyzates, encapsulated, leave-on hair conditioners containing)
ΙT
     Steroids, biological studies
     RL: BIOL (Biological study)
         (hydroxy, encapsulated, leave-on hair conditioners containing)
IT
     Steroids, compounds
     RL: BIOL (Biological study)
        (hydroxy, ethoxylated, encapsulated, leave-on hair conditioners containing)
TΤ
     Lanolin
     RL: BIOL (Biological study)
        (hydroxylated, encapsulated, leave-on hair conditioners containing)
     Waxes and Waxy substances
     RL: BIOL (Biological 'study)
        (jojoba, encapsulated, leave-on hair conditioners containing)
IT
     Alcohols, esters
     RL: BIOL (Biological study)
        (lanolin, acetylated, encapsulated, leave-on hair conditioners containing)
     Fatty acids, esters
ΙT
     RL: BIOL (Biological study)
        (lanolin, iso-Pr esters, encapsulated, leave-on hair conditioners
        containing)
IT
     Alcohols, compounds
     RL: BIOL (Biological study)
        (long-chain, ethoxylated propoxylated, encapsulated, leave-on hair
        conditioners containing)
IT
     Caseins, compounds
     RL: PREP (Preparation)
        (metal complexes, hair-conditioning agent encapsulation by, in manufacture
        of leave-on hair preparation)
```

```
Siloxanes and Silicones, biological studies
IT
     RL: BIOL (Biological study)
         (polyether-, encapsulated, leave-on hair conditioners containing)
ΙT
     Alcohols, compounds
     RL: BIOL (Biological study)
        (propoxylated, lanolin, encapsulated, leave-on hair conditioners
        containing)
ΙT
     Fats and Glyceridic oils
     RL: BIOL (Biological study)
        (sesame, encapsulated, leave-on hair conditioners containing)
IΤ
     Sulfones
     RL: PREP (Preparation)
        (vinyl, polymers, hair-conditioning agent encapsulation by, in manufacture
        of leave-on hair preparation)
ΙT
     Fats and Glyceridic oils
     RL: BIOL (Biological study)
        (wheat germ, encapsulated, leave-on hair conditioners containing)
ΙT
     52794-79-3, Isostearamide DEA
                                      99332-35-1
     RL: BIOL (Biological study)
        (encapsulated, leave-on hair conditioners containing)
IT
     81-48-1, D And C Violet no.2 85-83-6, Solvent red 24
     2475-45-8, Disperse blue 1
                                   2512-29-0, Pigment yellow 1
     20721-50-0, Disperse black 9
     RL: BIOL (Biological study)
        (encapsulated, leave-on hair dye prepns. containing)
ΙT
     134-09-8, Menthyl anthranilate 136-44-7, Glyceryl PABA
                                                                  5466-77-3
     6969-49-9, Octyl salicylate 58817-05-3, Octyl dimethyl PABA
     RL: BIOL (Biological study)
        (hair prepns. containing encapsulated conditioners and)
IT
     57-50-1, Sucrose, biological studies
                                            112-72-1, Myristyl alcohol
     555-43-1, Glycerol tristearate 1323-83-7, Glycerol distearate
    2726-73-0, 12-Hydroxystearyl alcohol 7047-84-9, Aluminum monostearate
    9000-01-5, Gum acacia 9002-18-0, Agar 9003-01-4, Polyacrylic acid 9003-39-8,
                                                9002-89-5, Polyvinyl alcohol
    Polyvinylpyrrolidone 9003-53-6, Polystyrene 9003-54-7,
    Poly(styrene-acrylonitrile)
                                   9004-32-4, Sodium CMC
                                                           9004-35-7,
    Cellulose acetate 9004-36-8, Cellulose acetate butyrate
    Cellulose acetate phthalate
                                   9004-54-0, Dextran, biological studies
    9004-57-3, Ethyl cellulose
                                  9004-70-0, Cellulose nitrate 9005-25-8,
    Starch, biological studies
                                  9005-35-0, Calcium alginate
                                                                 9005 - 38 - 3,
    Sodium alginate 9011-14-7, Poly(methyl methacrylate)
    9011-16-9, Methyl vinyl ether-maleic anhydride copolymer
                                                                 9012-36-6.
             9050-36-6, Maltodextrin 11099-07-3, Stearin
                                                                24980-41-4,
    Poly(&-caprolactone) 24991-23-9, Polyglutamic acid
                                                             25104-18-1,
    Polylysine 25248-42-4, Poly(&-caprolactone) 25322-68-3,
           ethylene 25513-46-6, Polyglutamic acid 26009-03-0, Polyglycolic 26124-68-5, Polyglycolic acid 26657-95-4, Glycerol dipalmitate
    Polyoxyethylene
    26657-96-5, Glycerol monopalmitate 31566-31-1, Glycerol monostearate
    36653-82-4, Cetyl alcohol 38000-06-5, Polylysine
                                                          53237-50-6, Polyvinyl
    acetate phthalate
                       120253-63-6
                                      155143-69-4
                                                     155143-71-8
    RL: BIOL (Biological study)
       (hair-conditioning agent encapsulation by, in manufacture of leave-on hair
       preparation)
    79-10-7D, Acrylic acid, salts, polymers 9000-07-1, Carrageenan
    9000-30-0, Guar gum 9000-36-6, Karaya gum 9002-98-6, Polyethyleneimine
    9003-32-1, Poly(ethyl acrylate)
                                      11138-66-2, Xanthan
          24937-78-8, Ethylene-vinyl acetate copolymer
    RL: BIOL (Biological study)
       (suspending agent, leave-on hair prepns. containing encapsulated
```

conditioners and)

IT 85-83-6, Solvent red 24 20721-50-0, Disperse black 9 RL: BIOL (Biological study)

(encapsulated, leave-on hair dye prepns. containing)

RN 85-83-6 HCAPLUS

CN 2-Naphthalenol, 1-[[2-methyl-4-[(2-methylphenyl)azo]phenyl]azo]- (9CI) (CA INDEX NAME)

RN 20721-50-0 HCAPLUS

CN Ethanol, 2,2'-[[4-[(4-aminophenyl)azo]phenyl]imino]bis- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ \text{HO-CH}_2\text{-CH}_2\text{-N} & & & \\ & & & \\ \text{HO-CH}_2\text{-CH}_2 & & & \\ \end{array}$$

IT 9003-01-4, Polyacrylic acid 9003-54-7,

Poly(styrene-acrylonitrile) 9011-14-7, Poly(methyl

methacrylate)

RL: BIOL (Biological study)

(hair-conditioning agent encapsulation by, in manufacture of leave-on hair preparation)

RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7

CMF C3 H4 O2

0

```
EtO-C-CH-CH2
 L21 ANSWER 37 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
     1993:588281 HCAPLUS
 AN
 DN
     119:188281
ED
     Entered STN: 30 Oct 1993
 TΙ
     Acidic hair dyeing compositions
IN
     Ishikawa, Hiroshi; Hyodo, Yoshiho; Arai, Yasuhiro
PA
     Shiseido Co., Ltd., Japan
     Jpn. Kokai Tokkyo Koho, 9 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
                                                                    DATE
                         ----
                                             -----
     JP 05194161
PΙ
                          A2
                                 19930803
                                             JP 1992-231326
                                                                    19920806
PRAI JP 1991-232190
                                 19910820
CLASS
 PATENT NO.
                CLASS PATENT FAMILY CLASSIFICATION CODES
 ______
     05194161 ICM A61K007-13

The title compns., which show coloring power and are shampoo-resistant,
 JP 05194161
     contain 0.01-15.0 weight% cationic compds. and optionally 0.01-5.0 weight%
     silicones. Japan Black 401 0.2, Japan Purple 401 0.3, Japan Yellow 4 0.1, benzyl alc. 5.0, tetrahydrofurfuryl alc. 12.0, citric acid 2.0,
     stearyltrimethylammonium chloride 0.3, hydroxyethyl cellulose 3.0, and H2O
     to 100% were mixed to give a dyeing composition, which showed good coloring
     power and rinse effect.
ST
     hair acid dye cation silicone
ΙT
     Siloxanes and Silicones, biological studies
     RL: BIOL (Biological study)
        (hair dyeing compns. containing acidic dyes and cations and)
IT
     Hair preparations
        (dyes, acidic dyes and cations in, with rinse effect)
IT
     112-03-8, Stearyltrimethylammonium chloride 26590-05-6, Merquat
     550 53633-54-8, Gafquat 755 63601-33-2, Polyquart H
     81859-24-7
     RL: BIOL (Biological study)
        (hair dyeing compns. containing acidic dyes and)
TΤ
     1064-48-8, Japan Black 401 1934-21-0, Japan Yellow 4
     4430-18-6, Japan Purple 401
     RL: BIOL (Biological study)
        (hair dyeing compns. containing cations and)
ΙT
     26590-05-6, Merquat 550 53633-54-8, Gafquat 755
     RL: BIOL (Biological study)
        (hair dyeing compns. containing acidic dyes and)
     26590-05-6 HCAPLUS
RN
     2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with
CN
     2-propenamide (9CI) (CA INDEX NAME)
    CM
         1
```

CRN 7398-69-8 CMF C8 H16 N . Cl

$$\begin{array}{c} \text{Me} \\ \mid \\ \downarrow \\ \text{H}_2\text{C} &= \text{CH} - \text{CH}_2 - \text{N} \\ \mid \\ \text{Me} \end{array} \text{CH}_2 - \text{CH} \\ &= \text{CH}_2$$

● cl-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 53633-54-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5 CMF C4 H10 O4 S

CM 2

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O) \times

CCI PMS

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2\text{N-CH}_2\text{-CH}_2\text{-O-C-C-Me} \end{array}$$

CM 4

CRN 88-12-0 CMF C6 H9 N O

IT 1064-48-8, Japan Black 401 1934-21-0, Japan Yellow 4 RL: BIOL (Biological study)

(hair dyeing compns. containing cations and)

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

```
L21 ANSWER 38 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     1993:502995 HCAPLUS
DN
     119:102995
ED
     Entered STN: 04 Sep 1993
     Hair dyeing compositions containing quaternary ammonium polymers
IN
     Fukunishi, Akira; Rikuta, Kazufumi
PA
     Sanyo Chemical Ind Ltd, Japan; Tokyo Eazoru Kagaku Kk
     Jpn. Kokai Tokkyo Koho, 9 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM A61K007-13
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                                         APPLICATION NO.
                      KIND
                             DATE
                                                              DATE
                       ____
                                         -------
    JP 05112438
                        A2
                              19930507
                                         JP 1992-56903
                                                              19920206
    JP 07005454
                       B4
                              19950125
PRAI JP 1991-246577
                              19910831
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 JP 05112438 ICM A61K007-13
    The title aqueous compns. contain (co)polymers of
    dialkyldi[(meth)allyl]ammonium salts, C black and/or organic pigments, and
    acidic dyes. The compns. show good color build-up property, quickly
    develop shampoo- and sweat-resistant colors, and do not damage the hair.
    N, N-dimethyl-3,5-methylenepiperidinium chloride polymer 1.5, C black 2.5,
    acidic dyes (0.5:1:1 Acid Red, Resorcin Brown, and Naphthol Blue Black)
    0.5, benzyl alc. 10, N-methylpyrrolidone 15, citric acid 1.5, hydroxy
    cellulose 1.0, EtOH 7, and H2O to 100% were mixed to give a dyeing composition
    hair dye quaternary ammonium polymer; carbon black pigment hair dye;
ST
    all.ylammonium polymer acidic dye hair
IT
    Carbon black, biological studies
```

RL: BIOL (Biological study)

(hair dyeing compns. containing quaternary ammonium polymers and acidic dyes and, shampoo-resistant)

IT Hair preparations

> (dyes, containing carbon black and organic pigments and quaternary ammonium polymers and acidic dyes, shampoo-resistant)

IT Quaternary ammonium compounds, polymers

RL: BIOL (Biological study)

(polymers, hair dyeing compns. containing carbon black and organic pigments and acidic dyes and, shampoo-resistant)

IT 26062-79-3, Dimethyldiallylammonium chloride homopolymer 26062-80-6 26590-05-6, Acrylamide-dimethyldiallylammonium chloride copolymer

RL: BIOL (Biological study)

(hair dyeing compns. containing carbon black and organic pigments and acidic dyes and, shampoo-resistant)

1064-48-8, Naphthol Blue Black 1320-07-6, Resorcin Brown ΙT 11119-62-3, Acid Red

RL: BIOL (Biological study)

(hair dyeing compns. containing carbon black and organic pigments and quaternary ammonium polymers and, shampoo-resistant)

ΙT 147-14-8 3520-72-7 **6448-95-9**, Brilliant Fast Scarlet RL: BIOL (Biological study)

(hair dyeing compns. containing quaternary ammonium polymers and acidic **dyes** and, shampoo-resistant)

ΙT 26590-05-6, Acrylamide-dimethyldiallylammonium chloride copolymer

RL: BIOL (Biological study)

(hair dyeing compns. containing carbon black and organic pigments and acidic dyes and, shampoo-resistant)

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} \xrightarrow{\text{H}} \text{CH}_2 - \text{CH} \Longrightarrow \text{CH}_2 \\ \downarrow \\ \text{Me} \end{array}$$

C1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

IT 1064-48-8, Naphthol Blue Black

RL: BIOL (Biological study)

(hair dyeing compns. containing carbon black and organic pigments and quaternary ammonium polymers and, shampoo-resistant)

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

IT 6448-95-9, Brilliant Fast Scarlet

RL: BIOL (Biological study)

(hair dyeing compns. containing quaternary ammonium polymers and acidic dyes and, shampoo-resistant)

RN 6448-95-9 HCAPLUS

CN 2-Naphthalenecarboxamide, 3-hydroxy-4-[(2-methyl-5-nitrophenyl)azo]-N-phenyl- (9CI) (CA INDEX NAME)

L21 ANSWER 39 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1993:219464 HCAPLUS

DN 118:219464

ED Entered STN: 29 May 1993 TI Hair dyeing compositions

```
IN
      Fukunishi, Akira; Rikuta, Kazufumi
 PΑ
      Sanyo Chemical Industries Ltd., Japan; Tokyo Eazoru Kagaku Kk
 SO
      Jpn. Kokai Tokkyo Koho, 8 pp.
      CODEN: JKXXAF
 DT
      Patent
 LA
      Japanese
 IC
      ICM A61K007-13
 CC
      62-3 (Essential Oils and Cosmetics)
 FAN.CNT 1
      JP 05025026
     PATENT NO.
                                            APPLICATION NO. DATE
                        ----
                                           -----
PI JP 05025026 A2 19930202
JP 3499573 B2 20040223
PRAI JP 1991-208440 19910724
                                           JP 1991-208440 19910724
 CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 JP 05025026 ICM A61K007-13
     Aqueous hair dyeing compns., which develop fast and shampoo-resistant colors,
     contain amphoteric polymers, carbon black, and acidic dyes. An aqueous hair
     dyeing composition containing copolymer of CH2: CMeCO2CH2CH2N+Me2CH2CO2- and Bu
     methacrylate 1.5, carbon black 2.5, and 0.5:1:1 Japan Red
     106-Japan Brown 201-Japan Black 401 mixture 0.5 weight% was formulated.
     hair acidic dye carbon black; amphoteric polymethacrylate dye
ST
     hair
IT
     Polymers, biological studies
     RL: BIOL (Biological study)
        (amphoteric, hair dyeing compns. containing carbon black and acidic dyes
        and, shampoo-resistant)
ΙT
     Carbon black, biological studies
     RL: BIOL (Biological study)
        (hair dyeing compns. containing amphoteric polymethacrylates and
        acidic dyes and, shampoo-resistant)
IΤ
     Hair preparations
        (dyes, containing amphoteric polymethacrylates and carbon black
        and acidic dyes, shampoo-resistant)
TΤ
     1064-48-8, Japan Black 401 1320-07-6, Japan Brown 201
     3520-42-1, Japan Red 106
     RL: BIOL (Biological study)
        (hair dyeing compns. containing amphoteric
        polymethacrylates and carbon black and, shampoo-resistant)
IT
     136372-47-9 147398-77-4 147398-78-5
     RL: BIOL (Biological study)
        (hair dyeing compns. containing carbon black and acidic dyes and,
        shampoo-resistant)
     1064-48-8, Japan Black 401
ΙT
     RL: BIOL (Biological study)
        (hair dyeing compns. containing amphoteric
        polymethacrylates and carbon black and, shampoo-resistant)
     1064-48-8 HCAPLUS
RN
     2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-
CN
     (phenylazo)-, disodium salt (9CI) (CA INDEX NAME)
```

●2 Na

IT 136372-47-9 147398-77-4 147398-78-5

RL: BIOL (Biological study)

(hair dyeing compns. containing carbon black and acidic dyes and, shampoo-resistant)

RN 136372-47-9 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 62723-61-9 CMF C10 H17 N O4

CM 2

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

RN 147398-77-4 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 62723-61-9 CMF C10 H17 N O4

CM 2

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ & || & || \\ \text{Me-} & \text{C--} \text{C--} \text{OMe} \end{array}$$

RN 147398-78-5 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-N,N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with ethenyl acetate (9CI) (CA INDEX NAME)

CM 1

CRN 62723-61-9 CMF C10 H17 N O4

CM 2

CRN 108-05-4 CMF C4 H6 O2

AcO-CH=CH2

L21 ANSWER 40 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1992:46019 HCAPLUS

DN 116:46019

ED Entered STN: 08 Feb 1992

TI Hair dyes containing glyceryl stearates

IN Tsujino, Yoshio

PA Yamahatsu Sangyo Kaisha, Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DT Patent

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LA
      Japanese
 IC
      ICM A61K007-13
      62-3 (Essential Oils and Cosmetics)
      Section cross-reference(s): 41
 FAN.CNT 1
                               APPLICATION NO.
     PATENT NO.
                       KIND
                                                                 DATE
      -----
                                           -----
     JP 03157320 A2 19910705 JP 1989-297854 JP 2890126 B2 19990510
 ΡI
                                                                 19891115
     WO 9218094
                        A1 19921029 WO 1991-JP509
                                                                 19910417
         W: KR, US
US 5403357
PRAI JP 1989-297854
                        A 19950404
                                           US 1992-955874 19921211
                               19891115
     WO 1991-JP509 W
                               19910417
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 _____
 JP 03157320 ICM A61K007-13
US 5403357 ECLA A45D019/02; A45D034/04C; A61K007/06Z; A61K007/13
OS
   MARPAT 116:46019
     A hair dye composition contains pigment, resin, an organic solvent, and \geq 1
     compound selected from the group comprising (1) monoglyceryl stearate, (2)
     polyglyceryl stearate, (3) sorbitan stearate, (4) polyoxyethylenesorbitan
     stearate, (5) polyoxyethylene sorbitol stearate
     stearoyl, but not R1 = R2 = R3 = H; b+4c+d = 1-10), (6) polyoxyethylene
     glyceryl stearate, and (7) propylene glycol stearate. This formulation
     prevents hardening of dyes at the site of application. A hair dye
     consisted of Yukaformer AM 75 Black 35.0, EtOH 64.75, and glyceryl
     distearate 0.25 parts by weight
ST
     hair dye glyceryl stearate
     Siloxanes and Silicones, biological studies
IT
     RL: BIOL (Biological study)
        (Me Ph, hair dyes containing stearic acid derivs. and)
IT
     Hair preparations
        (dyes, stearic acid derivs. and resins and organic solvents in)
ΙT
     57-11-4D, Stearic acid, esters 1323-83-7, Glyceryl distearate
     1338-41-6, Sorbitan monostearate 9005-67-8
                                                 9005-71-4
                                                             12694-22-3,
     Diglyceryl monostearate 12709-64-7, Decaglyceryl tristearate
     26\overline{658}-19\overline{-5}, Sorbitan tristearate 31566-3\overline{1-1}, Glyceryl monostearate 34424-97-0, Hexaglyceryl distearate 39529-26-5, Decaglyceryl
     decastearate 41080-66-4 53195-79-2 95461-64-6, Decaglyceryl pentastearate 138417-56-8
     RL: BIOL (Biological study)
        (hair dyes containing)
TΤ
     633-96-5, Japan Orange Number 205 136372-47-9, Yukaformer
     AM-75 Black 136372-47-9, Yukaformer AM 75 Brown 138361-81-6,
     Plassize L 53 Amber A 138361-82-7, Plassize L 53 Black CA 138361-83-8,
     Plassize L 53DA
     RL: BIOL (Biological study)
        (hair dyes containing stearic acid derivs. and)
     633-96-5, Japan Orange Number 205 136372-47-9, Yukaformer
TΤ
     AM-75 Black
     RL: BIOL (Biological study)
        (hair dyes containing stearic acid derivs. and)
     633-96-5 HCAPLUS
RN
CN
    Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt
     (9CI) (CA INDEX NAME)
```

Na

RN 136372-47-9 HCAPLUS

CN Ethanaminium, N-(carboxymethyl)-N, N-dimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, inner salt, polymer with butyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 62723-61-9 CMF C10 H17 N O4

CM 2

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{n-BuO-C-C-Me} \end{array}$$

L21 ANSWER 41 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1991:49342 HCAPLUS

DN 114:49342

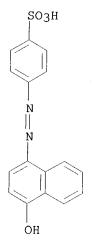
ED Entered STN: 09 Feb 1991

TI Wave-setting hair dye.

IN Watanabe, Katsuhiro; Ono, Tatsuo; Ota, Toshio; Minei, Tadayuki; Horikoshi,

```
Toshio
 PΑ
      San-Ei Kagaku Co., Ltd., Japan
 SO
      Jpn. Kokai Tokkyo Koho, 31 pp.
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
IC
     ICM A61K007-13
     ICS A61K007-09
CC
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                       KIND
                               DATE
                                           APPLICATION NO.
                                                                 DATE
                        ----
                                           -----
PI
     JP 02076807
                       A2
                               19900316
                                           JP 1989-150744
                                                                 19890614
     JP 2842621
                        В2
                               19990106
PRAI JP 1988-149043
                               19880616
CLASS
 PATENT NO.
               CLASS PATENT FAMILY CLASSIFICATION CODES
 JP 02076807
                ICM A61K007-13
                ICS
                       A61K007-09
     The title preparation consists of composition A and B. The composition A
contains (1)
     \geq 1 reducing agent (2-19% by weight) selected from mercapto compds.,
     sulfites, and bisulfites, (2) an alkali (0.01-15.0%), (3), a water-soluble
     polymer (0.1-10.0\%), or a mixture of the polymer (or a higher alc.) 1-30%
     and an anion activator 0.1-8.0%, or a combination of the components, with
     the viscosity of 100-40,000 cP and pH 2-12. The composition B consists of (1)
     \geq 1 dye 1-30% by weight, (2) a water-soluble polymer 0.1-10.0%, or a mixture
     of the polymer (or a higher alc.) 1-30 and an anion activator 0.1-8.0%, or
     a combination of the components, with the viscosity of 30-50,000 cP. The
     hair preparation may also contain 0.5-25% oxidizing agent consisting of (1)
     ≥1 compound selected from bromates, perborates, H2O2, persulfates,
     and peracetates, and (2) \geq 1 compound selected from cation activators,
     amphoteric and anion activators. It may also contain alcs., other cation
     activators, amphoteric activators, and soluble polymers. Numerous components
     are listed.
ST
     hair wavesetter dye
     Alcohols, biological studies
IT
     Alkali metals, biological studies
     Mercapto compounds
     Polymers, biological studies
     Sulfites
     RL: BIOL (Biological study)
        (hair wave-setting and dye compns. containing)
IT
     Hair preparations
        (dyes, containing wave-setting agents)
IT
     Sulfites
     RL: BIOL (Biological study)
        (hydrogen, hair wave-setting and dye compns. containing)
IT
     Hair preparations
       (wave-setting, containing dyes)
     52-89-1, L-Cysteine hydrochloride
ΙT
                                       57-50-1D, Sucrose, acetylated
    102-71-6, Triethanolamine, biological studies 112-02-7,
    Cetyltrimethylammonium chloride 112-03-8 112-72-1, Myristyl alcohol
    112-92-5, Stearyl alcohol 123-03-5, Cetylpyridinium chloride
    Stearyldimethylamine 139-96-8, Lauryl sulfate triethanolamine salt
    141-43-5, Monoethanolamine, biological studies 151-21-3, Sodium lauryl
    sulfate, biological studies 518-47-8 523-44-4, Japan Orange
    402 587-98-4, Japan Yellow 406 683-10-3,
```

Lauryldimethylaminoacetic acid betaine 846-70-8 860-22-0, Japan Blue 2 915-67-3, Japan Red 2 **1064-48-8**, Japan Black 401 1120-01-0, Sodium cetyl sulfate 1658-56-6, Japan Red Number 506 1934-21-0, 2321-07-5, Japan Yellow 201 Japan Yellow 4 2353-45-9, Japan Green 3 2650-18-2, Japan Blue 205 **2783-94-0**, Japan Yellow 5 3374-30-9, Japan Blue 203 3520-42-1, Japan Red 106 3564-09-8, Japan Red 502 3567-66-6, Japan Red 227 3761-53-3, Japan Red Number 3844-45-9, Japan Blue 1 4403-90-1, Japan Green 201 4430-18-6, Japan Purple 401 4680-78-8, Japan Green Number 402 5141-20-8, Japan Green 5421-46-5, Ammonium thioglycolate 6252-76-2, Japan Red 401 6358-69-6, Japan Green 204 6372-96-9, Japan Yellow Number 402 6417-61-4. Japan Blue Number 202 6417-85-2 7722-84-1, Hydrogen peroxide, biological studies 7789-38-0, Sodium bromate 9003-04-7, Aronvis S 9003-39-8, PVP-K 90 17301-53-0 17372-87-1 18472-87-2, Japan Red 104 19381-50-1, Japan Green 401 26062-79-3, Merquat 100 **26590-05-6** , Merquat 550 33239-19-9, Japan Orange Number 207 28880-55-9 36653-82-4, Cetyl alcohol **53633-54-8**, Gafquat 755 76050-42-5. Carbopol-940 81859-24-7, Leogard G RL: BIOL (Biological study) (hair wave-setting and dye compns. containing) **523-44-4,** Japan Orange 402 **587-98-4,** Japan Yellow 406 1064-48-8, Japan Black 401 1934-21-0, Japan Yellow 4 **2783-94-0,** Japan Yellow 5 **3564-09-8,** Japan Red 502 3567-66-6, Japan Red 227 3761-53-3, Japan Red Number 503 9003-04-7, Aronvis S 26590-05-6, Merquat 550 **53633-54-8**, Gafquat 755 RL: BIOL (Biological study) (hair wave-setting and dye compns. containing) 523-44-4 HCAPLUS Benzenesulfonic acid, 4-[(4-hydroxy-1-naphthalenyl)azo]-, monosodium salt (CA INDEX NAME)



IT

CN

● Na

RN 587-98-4 HCAPLUS
CN Benzenesulfonic acid, 3-[[4-(phenylamino)phenyl]azo]-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

RN 2783-94-0 HCAPLUS

CN 2-Naphthalenesulfonic acid, 6-hydroxy-5-[(4-sulfophenyl)azo]-, disodium

ELHILO 09/663942 8/20/04 Page 134

salt (9CI) (CA INDEX NAME)

●2 Na

RN 3564-09-8 HCAPLUS CN 2.7-Naphthalenedisu

2,7-Naphthalenedisulfonic acid, 3-hydroxy-4-[(2,4,5-trimethylphenyl)azo]-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 3567-66-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-amino-4-hydroxy-3-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

•2 Na

RN 3761-53-3 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-[(2,4-dimethylphenyl)azo]-3-hydroxy-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 9003-04-7 HCAPLUS

CN 2-Propenoic acid, homopolymer, sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 9003-01-4

CMF (C3 H4 O2)x

CCI PMS

CM 2

CRN 79-10-7 CMF C3 H4 O2

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \mid \\ \downarrow \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} + \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \mid \\ \text{Me} \end{array}$$

● c1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

RN 53633-54-8 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, polymer with 1-ethenyl-2-pyrrolidinone, compd. with diethyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 64-67-5 CMF C4 H10 O4 S

CM 2

CRN 30581-59-0

CMF (C8 H15 N O2 . C6 H9 N O) \times

CCI PMS

CM . 3

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} & \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2\text{N---} & \text{CH}_2\text{----} & \text{C----} & \text{C----} & \text{Me} \end{array}$$

CM 4

CRN 88-12-0 CMF C6 H9 N O

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L21 ANSWER 42 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
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AN 1991:29928 HCAPLUS

DN 114:29928

ED Entered STN: 26 Jan 1991

TI Hair dyes comprising amine oxides and surfactants

IN Schrader, Karlheinz

PA Blendax G.m.b.H., Germany

SO Eur. Pat. Appl., 7 pp. CODEN: EPXXDW

DT Patent

LA German

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
PI EP 367926	A1	19900516	EP 1989-115806	19890828			
EP 367926	B1	19931020					
R: AT,	BE, CH, DE, ES	S, FR, GB,	GR, IT, LI, LU, NL, SE				
AT 96015	E	19931115	AT 1989-115806	19890828			
ES 2046407	Т3	19940201	ES 1989-115806	19890828			
PRAI DE 1988-383		19881010					
EP 1989-115	806	19890828					
CLASS							
PATENT NO.	CLASS PATENT	FAMILY CLA	ASSIFICATION CODES				

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES

EP 367926 ICM A61K007-13

AB Hair dyes comprise in addition to a direct dye 2.5-20% amphoteric surfactant, 1-10% surface-active amine oxide, 1-10% nonionic surfactant, and, optionally, 0.5-5% protein hydrolyzate. A hair dye comprised protein hydrolyzate 2.00, 2Na EDTA 0.80, polyoxyethylene (120) methylglucoside oleate 2.50, cocoamidopropylbetaine 5.00, cocoalkanolamide 2.00, polyglycol 3.00, cocoamidopropyldimethylamine oxide 5.00, poly(sodium acrylate) 0.40, polyethylenesorbitan monostearate 3.50,

```
preservative 0.20, perfume 0.20, C.I. 12,719 0.02, C.I. 12,251 0.02, C.I.
      12,250 0.04, C.I. 56,059 0.03, and water to 100% by weight
 ST
      hair dye amine oxide surfactant
 ΙT
      Fibroins
      RL: BIOL (Biological study)
         (from seal, hydrolyzate, hair dye containing)
 ΙT
      Protein hydrolyzates
      RL: BIOL (Biological study)
         (hair dye containing)
ΙT
      Collagens, compounds
      RL: BIOL (Biological study)
         (hydrolyzate, hair dye containing)
TΤ
      Surfactants.
         (amphoteric, hair dyes containing)
      Amines, oxides
TΤ
      RL: BIOL (Biological study)
         (coco alkyldimethyl, N-oxides, hair dye containing)
IT
      Amides, uses and miscellaneous
      RL: BIOL (Biological study)
         (coco, N-(hydroxyalkyl), hair dye containing)
IT
     Amides, uses and miscellaneous
     RL: BIOL (Biological study)
         (coco, N-(hydroxyethyl), hair dye containing)
ΤТ
     Amides, compounds
     RL: BIOL (Biological study)
         (coco, N-[3-(dimethylamino)propyl], N-oxides, hair dye containing)
IT
     Hair preparations
         (dyes, amine oxide-containing)
ΙT
     Castor oil
     RL: BIOL (Biological study)
         (hydrogenated, ethoxylated, hair dye containing)
IT
     Surfactants
         (nonionic, hair dyes containing)
ΙT
     Amines, oxides
     RL: BIOL (Biological study)
        (N-oxides, hair dyes containing)
ΙT
                1643-20-5, Lauryldimethylamine oxide
     142-78-9
                                                        8004-87-3, C.I. Basic
     Violet 1
                9002-98-6
                             9005-00-9, Polyoxyethylene stearyl ether
     9005-65-6, Polyoxyethylene sorbitan monooleate
                                                        25066-20-0
                  36574-66-0D, N-cocoacyl derivs.
     26381-41-9
                                                     53026-67-8
     68123-13-7 68391-30-0
                              68391-31-1
                                           70094-14-3D, N-cocoacyl
     derivs. 71134-97-9
                         91776-00-0
                                       131311<del>-</del>37-0
     RL: BIOL (Biological study)
        (hair dye containing)
ΙT
     26381-41-9 68391-30-0 71134-97-9
     RL: BIOL (Biological study)
        (hair dye containing)
RN
     26381-41-9 HCAPLUS
     2-Naphthalenaminium, 8-[(4-aminophenyl)azo]-7-hydroxy-N,N,N-trimethyl-,
CN
     chloride (9CI) (CA INDEX NAME)
```

● c1-

RN 68391-30-0 HCAPLUS

CN 2-Naphthalenaminium, 7-hydroxy-8-[(2-methoxyphenyl)azo]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● cl-

RN 71134-97-9 HCAPLUS

CN 2-Naphthalenaminium, 8-[(4-amino-2-nitrophenyl)azo]-7-hydroxy-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)

● C1-

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L21 ANSWER 43 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
ΔN
     1991:29926 HCAPLUS
DN
     114:29926
ED
     Entered STN: 26 Jan 1991
     Stable oxidative hair dye creams with high electrolyte content
TI
IN
     Abels, Willi; Aeby, Johann; Hoch, Dietrich; Mager, Herbert
PA
     Wella A.-G., Germany
     Ger. Offen., 6 pp.
SO
     CODEN: GWXXBX
DT
     ·Patent
LA
     German
     ICM A61K007-13
IC
     62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
     PATENT NO.
                            KIND
                                    DATE
                                                 APPLICATION NO.
                                                                            DATE
                            ----
                                                 ------
PΙ
     DE 3834142
                            Α1
                                    19900412
                                                 DE 1988-3834142
                                                                            19881007
PRAI DE 1988-3834142
                                    19881007
CLASS
                  CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
 -----
DE 3834142
                 ICM
                          A61K007-13
     Oxidative hair dye creams comprise ≤20% dye-electrolyte mixture
     incorporated into a carrier. The carrier comprises fatty mixture 13.6-41.0, NH3 0.1-10.0, perfume 0.0-1.0, complexing agent 0.0-0.5, aliphatic C1-6 alc.
     0.0-0.5, oleic acid 0.0-2.0, and water 29.0-86.2\% by weight The fatty mixture is made of C14-20 fatty alc. 2.0-6.0, glycerol monodistearate 4.0-10.0,
     coco fatty acid monoethanolamide 2.0-6.0, glycol distearate 0.5-4.0,
     ethoxylated lauryl alc. 4.0-7.0, coco fatty acid 2-sulfoethyl ester Na
     salt 0.1-1.0, Na lauryl alc. diglycol ether sulfate 1.0-5.0, and
     quaternized poly(dimethylaminoethyl methacrylate) 0.0-2.0% by weight The cream is stable at 0-40° for \ge12 mo, in spite of
     the high electrolyte content. The electrolytes originate from the salt
     forms of coupling agents and developers. A hair dye cream was made of
     cetylstearyl alc. 4.00, glycerol monostearate 6.00, coco fatty acid
     monoethanolamide 3.00, glycol distearate 1.50, 28% aqueous Na lauryl alc.
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diglycol ether sulfate 10.00, coco fatty acid 2-sulfoethyl ester Na salt
      0.50, ethoxylated lauryl alc. 4.00, Me2SO4-quaternized
      poly(dimethylaminoethyl methacrylate) 0.25, Na2-EDTA 0.25,
      ascorbic acid 0.25, perfume 0.25, NH3 3.00, oleic acid 1.00,
      1,4-diaminobenzene 4.80, resorcinol 1.40, 4-(2-hydroxyethyl)amino-1,2-
     methylenedioxybenzene-HCl 1.40, 2-amino-4-(2-hydroxyethyl)aminoanisole
      sulfate 7.00, and water 51.40 g.
 ST
      oxidative hair dye stable cream
      Electrolytes
         (oxidative hair dye cream stabilization by)
     Alcohols, biological studies
      RL: BIOL (Biological study)
         (C14-20, hair dye cream containing, oxidative)
 ΙT
     Alcohols, biological studies
     RL: BIOL (Biological study)
         (C16-18, hair dye cream containing, oxidative)
     Amides, biological studies
IT
     RL: BIOL (Biological study)
         (coco, N-(hydroxyethyl), hair dye cream containing, oxidative)
IT
     Glycols, esters
     RL: BIOL (Biological study)
         (diesters, with stearic acid, hair dye cream containing, oxidative)
ΙT
     Hair preparations
         (dyes, oxidative, stable creams)
IT
     Glycerides, biological studies
     RL: BIOL (Biological study)
        (stearic acid-containing, hair dye cream containing, oxidative)
ΙT
     57-11-4D, Octadecanoic acid, esters with glycerol
                                                        84-85-5,
     4-Methoxy-1-naphthol 90-15-3, 1-Naphthol
                                                 95-70-5, 2,5-Diaminotoluene
     95-88-5, 4-Chlororesorcinol
                                   96-91-3, 2-Amino-4,6-dinitrophenol
     99-57-0, 2-Amino-4-nitrophenol
                                      106-50-3, 1,4-Benzenediamine, biological
               108-45-2, 1,3-Benzenediamine, uses and miscellaneous
                                                                       108-46-3,
     1,3-Benzenediol, biological studies
                                          116-85-8
                                                       123-30-8
                                                                  128-95-0,
     1,4-Diaminoanthraquinone
                                137-19-9, 4,6-Dichlororesorcinol
                                                                    533-31-3,
     4-Hydroxy-1,2-methylenedioxybenzene
                                          591-27-5, m-Aminophenol
                                                                      608 - 25 - 3,
     2-Methylresorcinol 632-99-5
                                     1004-74-6, Tetraaminopyrimidine
                 2380-94-1, 4-Hydroxyindole
     1220-94-6
                                             2475-45-8, 1,4,5,8-
     Tetraaminoanthraquinone 2835-95-2, 5-Amino-2-methylphenol
                                                                    2835-98-5,
     2-Amino-5-methylphenol
                              2835-99-6, 3-Methyl-4-aminophenol
                                                                  3248-91-7
     5307-02-8, 2,5-Diaminoanisole 5858-51-5
                                               6100 - 60 - 3,
     2,4-Dihydroxyanisole 6358-09-4 7664-93-9D, Sulfuric acid, cetylstearyl
     esters, sodium salts
                            9002-92-0
                                        10190-75-7
                                                     14268-66-7.
     4-Amino-1,2-methylenedioxybenzene
                                        16060-49-4, 2-Amino-5-ethoxyphenol
     17672-22-9, 2-Amino-6-methylphenol
                                          24905-87-1 25154-86-3D,
     Poly(dimethylaminoethyl methacrylate), quaternized
                                                         26183-44-8
     52025-40-8
                  73793-80-3, 2,5-Diaminobenzyl alcohol
                                                          81329-90-0
     83763-47-7
                  93841-24-8
                               94158-14-2
                                          101562-88-3
                                                          102767-27-1
     104516-93-0
                   131169-96-5
     RL: BIOL (Biological study)
        (hair dye cream containing, oxidative)
     5858-51-5 25154-86-3D, Poly(dimethylaminoethyl
ΙT
     methacrylate), quaternized
     RL: BIOL (Biological study)
        (hair dye cream containing, oxidative)
RN
     5858-51-5 HCAPLUS
CN
     1-Naphthalenesulfonic acid, 6-[(4-aminophenyl)azo]-5-hydroxy-, monosodium
     salt (9CI) (CA INDEX NAME)
```

● Na

25154-86-3 HCAPLUS RN

2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, homopolymer CN (9CI) (CA INDEX NAME)

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2 \text{N-CH}_2 \text{--} \text{CH}_2 \text{--} \text{O-C-C-Me} \end{array}$$

L21 ANSWER 44 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1990:597653 HCAPLUS

DN 113:197653

ED Entered STN: 23 Nov 1990

Hair dyes containing water-soluble dyes, carbon black, and nonionic TIsurfactants

ΙN Kino, Mitsuhiko; Kato, Kazuo

PAHoya Corp., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF

DTPatent

LA Japanese

IC ICM A61K007-13

62-3 (Essential Oils and Cosmetics) CC

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
	-	 -					
PI JP 01242518	A2	19890927	JP 1988-70398	19880324			
JP 04004288	B4	19920127		1000021			
PRAI JP 1988-70398		19880324					
CLASS							

CLASS

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES JP 01242518 ICM A61K007-13

Hair dyes contain carbon black and ≥1 water-soluble dye chosen from triphenylmethane dye, azo dye, quinoline dye, xanthene dye, indigoid dye, and anthraquinone dye, and a nonionic surfactant. Black Number-401 0.04, Orange Number-205 0.05, Red Number-201 0.01, purple Number- 401 0.01, carbon

black

ST

IT

IT

ΙT

TΤ

ΙT

ΙT

RN

CN

1.0, poly(oxyethylene)(7.5) nonylphenyl ether 5.0, poly(Et methacrylate) 7.0, brucine-modified anhydrous EtOH 2.0, EtOH 12.0, poly(vinyl pyrrolidone) 1.0, citric acid 0.3, Freon-21 9.0, and H2O to 100 weight% were mixed to prepare an aerosol foam hair dye, which was applied to the hair to develop uniform black color. When the dye was used for 7 days constantly, the hair was dyed firmly. hair dye carbon black surfactant Carbon black, biological studies RL: BIOL (Biological study) (hair dyes containing water-soluble dyes and surfactants and) Hair preparations (dyes, containing water-soluble dyes and carbon black and nonionic surfactants) Castor oil RL: BIOL (Biological study) (hydrogenated, ethoxylated, hair dyes containing water soluble dyes and carbon black and) Surfactants (nonionic, hair dyes containing water soluble dyes and carbon black and) **523-44-4**, Japan Orange number 402 **633-96-5**, Japan Orange number 205 1064-48-8 1103-39-5, Japan Red 206 1320-07-6, Japan Brown number 201 3520-42-1, Japan Red number 106 4430-18-6, Japan Purple number 401 **5858-81-1**, Japan Red number 201 6358-85-6, Japan Yellow number 205 **6448-95-9**, Japan Red 404 RL: BIOL (Biological study) (hair dyes containing carbon black and surfactants and) 9011-29-4, Poly(oxyethylene) sorbitol hexastearate Poly(oxyethylene) nonylphenyl ether 53195-79-2, Poly(oxyethylene) glycerin monostearate RL: BIOL (Biological study) (hair dyes containing water soluble dyes and carbon black and) **523-44-4**, Japan Orange number 402 **633-96-5**, Japan Orange number 205 1064-48-8 5858-81-1, Japan Red number 201 6448-95-9, Japan Red 404 RL: BIOL (Biological study) (hair dyes containing carbon black and surfactants and) 523-44-4 HCAPLUS Benzenesulfonic acid, 4-[(4-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI)

(CA INDEX NAME)

• Na

RN 633-96-5 HCAPLUS

CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

● Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 5858-81-1 HCAPLUS

CN 2-Naphthalenecarboxylic acid, 3-hydroxy-4-[(4-methyl-2-sulfophenyl)azo]-, disodium salt (9CI) (CA INDEX NAME)

•2 Na

RN 6448-95-9 HCAPLUS

CN 2-Naphthalenecarboxamide, 3-hydroxy-4-[(2-methyl-5-nitrophenyl)azo]-N-phenyl- (9CI) (CA INDEX NAME)

```
L21
    ANSWER 45 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
ΑN
    1990:124930 HCAPLUS
```

DN 112:124930

Entered STN: 31 Mar 1990 ED

TΙ Hair dyeing preparations containing dialkyldi(meth)allylammonium salt polymers and acidic dyes and dyeing methods

ΙN Fukunishi, Akira; Tsunekawa, Toshio; Kawai, Minoru

PΑ Sanyo Chemical Industries Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp. CODEN: JKXXAF

DTPatent

LA Japanese

IC ICM A61K007-13

CC 62-3 (Essential Oils and Cosmetics)

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 01279820 PRAI JP 1988-108508	A2	19891110 19880430	JP 1988-108508	19880430

PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES ____

JP 01279820 ICM A61K007-13

Hair dyes contain (co)polymers of dialkyldi(meth)allylammonium salts (and other monomers) and acidic dyes. Hair is dyed by application of the (co)polymers, then acidic dyes, or vice versa. The dyeing prepns. have good dyeing ability, develop fast colors, and are not irritating to the skin. Dimethyldiallylammonium chloride was polymerized in H2O in the presence of (NH4)2S208 at 50-60° for 10 h under N to give a polymer (I, average mol. weight 10,000). Hair was dyed with I and aqueous solution containing Japan Red

102, ethylene carbonate, N-methylpyrrolidone, EtOH, isopropanol, hydroxyethyl cellulose, and citric acid to develop shampoo-resistant color.

ST hair dye ammonium polymer

IΤ Quaternary ammonium compounds, polymers

(dialkyldi[(meth)allyl], polymers, hair dyes containing acidic dye and)

ITHair preparations

(dyes, containing dialkyl (meth) allylammnoium polymers and acidic dyes) IT110-89-4D, Piperidine, quaternized, polymers 123-75-1D, Pyrrolidine,

quaternized, polymers

RL: BIOL (Biological study)

(hair dyes containing acidic dye and)

IT 26062-79-3P, Poly(dimethyldiallylammonium chloride) 26062-80-6P, Poly(diethyldiallylammonium chloride) 26590-05-6P,

Acrylamide-dimethyldiallylammonium chloride copolymer

RL: PREP (Preparation)

(hair dyes containing acidic dye and, preparation of)

IT 1064-48-8, Japan Black 401 1320-07-6, Japan Brown 201

1934-21-0, Japan Yellow 4 2611-82-7, Japan Red 102 2650-18-2,

Japan Blue 205 4430-18-6, Japan Purple 401 6358-69-6, Japan Green 204 RL: BIOL (Biological study)

(hair dyes containing dialkyldi(meth)allylammnoium

polymer and)

IT 26590-05-6P, Acrylamide-dimethyldiallylammonium chloride copolymer

RL: PREP (Preparation)

(hair dyes containing acidic dye and, preparation of)

RN 26590-05-6 HCAPLUS

CN 2-Propen-1-aminium, N, N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 7398-69-8 CMF C8 H16 N . C1

$$\begin{array}{c} \text{Me} \\ \mid \\ \mid \\ \text{H}_2\text{C} \end{array} = \text{CH} - \text{CH}_2 - \text{N} + \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \mid \\ \text{Me} \end{array}$$

• c1-

CM 2

CRN 79-06-1 CMF C3 H5 N O

$$\begin{matrix} \text{O} \\ || \\ \text{H}_2\text{N}-\text{C}-\text{CH} == \text{CH}_2 \end{matrix}$$

IT 1064-48-8, Japan Black 401 1934-21-0, Japan Yellow 4

RL: BIOL (Biological study)

(hair dyes containing dialkyldi(meth)allylammnoium polymer and)

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

ELHILO 09/663942 8/20/04 Page 148

●2 Na

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

L21 ANSWER 46 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN

AN 1988:555956 HCAPLUS

DN 109:155956

ED Entered STN: 28 Oct 1988

TI An aqueous composition for treatment of keratinous fibers, its manufacture and use for treating human hair

IN Hefford, Robert John Warwick; Murray, Andrew Malcolm

PA Unilever PLC, UK; Unilever N. V.

SO Eur. Pat. Appl., 18 pp. CODEN: EPXXDW

DT Patent

LA English

IC ICM A61K007-06

ICS A61K007-13; D06M015-21; D06P001-52

CC 62-3 (Essential Oils and Cosmetics)

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

```
PΙ
     EP 257807
                         A2
                                 19880302
                                           EP 1987-306627
                                                                     19870728
     EP 257807
                          А3
                                 19890118
     EP 257807
                          В1
                                 19921007
         R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE
     CA 1298786 A1
                                 19920414
                                             CA 1987-542987
                                                                     19870724
     AU 8776173
                          A1
                       A1
B2
A2
B2
                                 19880204
                                             AU 1987-76173
                                                                     19870727
     AU 600738
                                 19900823
     JP 63035514
                                 19880216
                                           JP 1987-187488
                                                                     19870727
     JP 2575141
                                 19970122
     IN 166205
                      A 19900331 IN 1987-B0241
E 19921015 AT 1987-306627
T3 19940716 ES 1987-306627
A 19880405 BR 1987-3904
A 19890329 ZA 1987-5588
A 19900724 US 1989-358467
A 19920328 IN 1989-B0269
19860730
                      A
E
                                                                     19870727
     AT 81280
                                                                     19870728
     ES 2052567
                                                                     19870728
     BR 8703904
                                                                    19870729
     ZA 8705588
                                                                    19870729
     US 4943430
                                                                    19890530
     IN 170478
                                            IN 1989-BO269
                                                                     19891003
PRAI GB 1986-18634
     US 1987-74838
                                19870717
     IN 1987-BO241
                                 19870727
     EP 1987-306627
                                 19870728
CLASS
 PATENT NO.
              CLASS PATENT FAMILY CLASSIFICATION CODES
 EP 257807 ICM A61K007-06
                        A61K007-13; D06M015-21; D06P001-52
                 ICS
     MARPAT 109:155956
     An aqueous single-phase composition, particularly for treatment of keratinous
AΒ
     fibers, comprises ≥1 cationic polymer 0.1-10, ≥1 anionic
     monomer 0.01-10, and \geq 1 solubilizing agent selected from amphoteric
     detergent active compds. 0.1-20 and inorg. electrolytes 1-30 weight%.
     anionic monomer may be a food dye or a sunscreen agent. The amphoteric
     solubilizing agent may be a betaine; the inorg. electrolyte may be a
     chloride, bromide, or nitrate of an alkali or alkaline earth metal, ammonium,
     or substituted ammonium. The anionic-cationic charge ratio is preferably
     <0.7:1. The composition is prepared by mixing the oppositely charged
ingredients
     in the presence of the solubilizing agent. The aqueous composition is applied
to
     wet hair as a solution diluted ≥10 times with water. A single liquid
     phase clear hair dyeing composition contains Merquat 100 (40% solution) 2.5,
Acid
     Black I 0.5, Empigen BB (30% solution) 2.7, NaCl 12 weight%, and balance water
     with pH 6.0. Blond hair swatches treated with 0.25 g of the formulation
     diluted with 2.25 g water for 2 min and then rinsed were dyed a strong,
     intense blue color.
     cationic polymer hair dye; anionic monomer hair dye; amphoteric detergent
     solubilization hair dye; electrolyte inorg solubilization hair dye
     Bromides, biological studies
     Chlorides, biological studies
     Nitrates, biological studies
     RL: BIOL (Biological study)
        (solubilizing electrolyte, for anionic and cationic components of hair
        dyes)
```

(C12-14-alkyldimethyl, amphoteric solubilizing agent, for anionic and

(dyes, anionic monomers and cationic polymers and amphoteric or

cationic components of hair dyes)

RL: BIOL (Biological study)

Hair preparations

IT

ΙT

Betaines

electrolytic solubilizing agents in)

IT 59355-60-1, Empigen BT

RL: BIOL (Biological study)

(amphoteric solubilizing agent, for anionic and cationic components of hair dyes)

IT 860-22-0, Food blue 1 1064-48-8 1934-21-0 2519-30-4,

Food black 1 2611-82-7, Food red 7 3567-69-9, Food red 3

3734-67-6, Food red 10 4553-89-3 8004-92-0, C.I. Acid Yellow 3

8005-03-6, Acid black 2

RL: BIOL (Biological study)

(anionic dye, in hair dyes)

IT 830-09-1D, salts 56265-46-4, Parsol hydro 116751-94-1

RL: BIOL (Biological study)

(anionic sunscreen, in hair dyes)

IT 2867-47-2, Dimethylaminoethyl methacrylate 9002-89-5D, Poly(vinyl alcohol), quaternized 9002-98-6 9003-39-8, Poly(n-vinylpyrrolidone) 9003-47-8, Poly(vinylpyridine)

25154-86-3, Poly(dimethylaminoethyl methacrylate)

26062-79-3, Poly(dimethyldiallylammonium chloride) 26062-81-7

61686-26-8 63451-27-4, Mirapol A-15 75345-27-6, Onamer M 87582-56-7,

Poly(vinylpyridinium chloride) 116656-62-3

RL: BIOL (Biological study)

(cationic polymer, in hair dyes)

IT 7647-14-5, Sodium chloride, biological studies

RL: BIOL (Biological study)

(solubilizing electrolyte, for anionic and cationic components of hair dyes)

IT 151-21-3D, Sodium lauryl sulfate, ethoxylated 39464-69-2, Briphos O3D RL: BIOL (Biological study)

(surfactant, in hair dyes)

IT 1064-48-8 1934-21-0 3734-67-6, Food red 10

RL: BIOL (Biological study)

(anionic dye, in hair dyes)

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

$$Ph-N=N$$
 HO_3S
 NH_2
 $N=N$
 NO_2

•2 Na

RN 1934-21-0 HCAPLUS

CN 1H-Pyrazole-3-carboxylic acid, 4,5-dihydro-5-oxo-1-(4-sulfophenyl)-4-[(4-sulfophenyl)azo]-, trisodium salt (9CI) (CA INDEX NAME)

●3 Na

RN 3734-67-6 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 5-(acetylamino)-4-hydroxy-3-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

IT 25154-86-3, Poly(dimethylaminoethyl methacrylate)

RL: BIOL (Biological study)

(cationic polymer, in hair dyes)

RN 25154-86-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(dimethylamino)ethyl ester, homopolymer (9CI) (CA INDEX NAME)

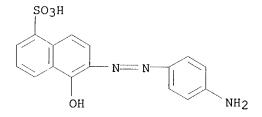
CM 1

CRN 2867-47-2 CMF C8 H15 N O2

$$\begin{array}{c|c} \text{O} & \text{CH}_2 \\ \parallel & \parallel \\ \text{Me}_2\text{N-CH}_2\text{-CH}_2\text{-O-C-C-Me} \end{array}$$

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L21 ANSWER 47 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
     1986:411847 HCAPLUS
DN
     105:11847
ED
     Entered STN: 13 Jul 1986
ΤI
     Oxidative hair-dye composition based on a low-viscosity carrier
IN
     Hoch, Dietrich; Konrad, Eugen; Pasquier, Gilbert; Mager, Herbert
PΑ
     Wella A.-G., Fed. Rep. Ger.
SO
     Eur. Pat. Appl., 23 pp.
     CODEN: EPXXDW
DΤ
     Patent
LA
     German
TC
     ICM A61K007-13
      62-3 (Essential Oils and Cosmetics)
CC
FAN.CNT 1
                         KIND DATE APPLICATION NO.
     PATENT NO.
                        KIND DATE
                                                                      DATE
     EP 166100 A1 19860102 EP 1985-104563
EP 166100 B1 19890111
PΙ
                                                                       19850415
         R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
     DE 3423589 A1 19860109 DE 1984-3423589 WO 8600223 A1 19860116 WO 1985-EP165
                                                                       19840627
     WO 8600223
                          A1
                                19860116 WO 1985-EP165
                                                                      19850415
         W: AU, BR, JP, US
     AU 8542394 A1
                                 19860124 AU 1985-42394
                      A1 19860124 AU 1985-42394
B2 19881201
T2 19861106 JP 1985-502018
B4 19900330
A 19861125 BR 1985-6791
E 19890115 AT 1985-104563
A 19861022 CN 1985-103112
B 19880928
A1 19890530 CA 1985-481419
A 19890520 IN 1985-CA380
A 19880216 US 1985-817851
19840627
                                                                      19850415
     AU 579633
     JP 61502531
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     JP 02012929
BR 8506791
                                                                      19850415
     AT 39840
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     CN 85103112
                                                                      19850424
     CN 85103112
     CA 1254833
                                                                     19850513
     IN 164721
                                                                      19850518
US 4725282
PRAI DE 1984-3423589
                                                                      19851127
                                 19840627
     EP 1985-104563
                                 19850415
     WO 1985-EP165
                                 19850415
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 ______
 EP 166100 ICM A61K007-13
     A carrier for hair-dyeing gels is made of an inorg. salt 0.2-5.0, Na
     lauryl alc. diglycol ether sulfate 1.4-5.0, coco fatty acid diethanolamide
     0.5-6.0, a 4-component mixture 4.0-14.0, H2O 56-83, NH3 0.1-5.0, aliphatic alc.
     0-5, perfume 0-1, and complexing agent 0-0.5% by weight The 4-component
     mixture contains cetylstearyl alc. 60-80, glyceryl (mono- and di)stearate
     10-30, lanolin alc. 0-20, and quaternized dimethylaminoethyl
     methacrylate homopolymer 0.1-0.2% by weight Thus, a hair-dyeing
     cream is given containing 95.10 g of the above carrier and 4.90 g dye mixture
     (m-aminophenol 0.20, 2,4-diaminophenethol sulfate 0.50, 2,5-diaminotoluene
     sulfate 3.00, and resorcinol 1.20 g). The inorg. salts used in the composition
     were Na2SO3, NaCl, and Na2SO4. The carrier has a low viscosity and thus
     allows fast mixing of the dye with H2O2.
ST
     hair dye carrier low viscosity
ΙT
     Chelating agents
        (hair-dye low-viscosity carrier compns. containing)
ΙT
     Alcohols, biological studies
     RL: BIOL (Biological study)
        (C16-18, hair-dye low-viscosity carrier composition containing)
IT
     Alcohols, biological studies
```

RL: BIOL (Biological study) (aliphatic, hair-dye low-viscosity carrier compns. containing) ΙT Amides, biological studies RL: BIOL (Biological study) (coco, N, N-bis(hydroxyethyl), hair-dye low-viscosity carrier composition containing) ΙT Hair preparations (dyes, oxidative, low-viscosity carrier compns. for) IT Alcohols, biological studies RL: BIOL (Biological study) (lanolin, hair-dye low-viscosity carrier compns. containing) ΙT 96-91-3 99-57-0 116-85-8 128-95-0 591-27-5 632**-**99-5 2475-45-8 6219-69-8 6369-59-1 3248-91-7 **5858-51-5** 10190-75-7 102767-27-1 24905-87-1 RL: BIOL (Biological study) (hair dye, low-viscosity carrier composition for) ΙT 95-70-5 123-30-8 2835-99-6 5307-02-8 56289-84-0 73793-80-3 106-50-3, uses and miscellaneous RL: BIOL (Biological study) (hair-dye developer, low-viscosity carrier composition for) ΙT 1323-83-7 3088-31-1 7664-41-7, biological studies 7681-49-4, 7757-82-6, biological studies 7757-83-7 biological studies **25154-86-3D**, quaternized 31566-31-1 RL: BIOL (Biological study) (hair-dye low-viscosity carrier composition containing) ΙT 84-85-5 90-15-3 95-88-5 108-46-3, biological studies 137-19-9 591-27-5 533-31-3 608**-**25-3 2835-95-2 6100-60-3 14268-66-7 81329-90-0 101562-88-3 RL: BIOL (Biological study) (hair-dye low-viscosity carrier composition for) TΤ 5858-51-5 RL: BIOL (Biological study) (hair dye, low-viscosity carrier composition for) RN 5858-51-5 HCAPLUS CN1-Naphthalenesulfonic acid, 6-[(4-aminophenyl)azo]-5-hydroxy-, monosodium salt (9CI) (CA INDEX NAME)



Na

CM 1

CRN 2867-47-2 CMF C8 H15 N O2

 $\begin{array}{c} \text{O} \quad \text{CH}_2 \\ \parallel \quad \parallel \\ \text{Me}_2 \text{N-CH}_2 - \text{CH}_2 - \text{O-C-C-Me} \end{array}$

```
L21 ANSWER 48 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
AN
     1985:172425 HCAPLUS
     102:172425
DN
ED
    Entered STN: 18 May 1985
TI
     Hair dyes
    Hoyu Co., Ltd., Japan
PΑ
     Jpn. Kokai Tokkyo Koho, 8 pp.
     CODEN: JKXXAF
DT
     Patent
LA
     Japanese
IC
     ICM A61K007-13
     62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.

JP 60004116

A2 19850110

JP 1983-111685

JP 02027968

B4 19900620

19830621
     PATENT NO.
                                                                  DATE
                                            -----
                                                                    19830621
PRAI JP 1983-111685
CLASS
 PATENT NO. CLASS PATENT FAMILY CLASSIFICATION CODES
 JP 60004116 ICM A61K007-13
AB Hair dyes contain volatile alcs. 40 .apprx. 95, a
     thickening agent 2 .apprx. 10, dyeing accelerators 2 .apprx. 30,
     carbon black and a triphenylmethane dye, azo dye,
     quinoline dye, xanthene dye, indigoid dye,
     and/or an anthraquinone dye (pH 1.5 .apprx. 4.5). These
     dyes dry rapidly and have strong affinity for the hair.
     Thus, a hair dye comprises Japan black 401 [
     86923-11-7] 0.2, EtOH 60.0, poly(acrylic acid)
     9003-01-4] 5.0, benzyl alc. [100-51-6] 6.0, tartaric acid 2.0,
     carbon black 0.5, and H2O 26.3% by weight
ST
     hair dye carbon black alc
IT
     Thickening agents
     Alcohols, biological studies
     Carbon black, biological studies
     RL: BIOL (Biological study)
        (hair dyes containing)
ΙT
     Hair preparations
        (dyes, alcs. and dyeing accelerators for)
     64-17-5, biological studies 100-51-6, biological studies
IT
     633-96-5 1064-48-8 3374-30-9 3520-42-1 6371-96-6 6417-83-0 9003-01-4 9004-62-0 25087-26-7
     RL: BIOL (Biological study)
        (hair dyes containing)
     633-96-5 1064-48-8 9003-01-4
     25087-26-7
```

RL: BIOL (Biological study)
 (hair dyes containing)

RN 633-96-5 HCAPLUS

CN Benzenesulfonic acid, 4-[(2-hydroxy-1-naphthalenyl)azo]-, monosodium salt (9CI) (CA INDEX NAME)

Na

RN 1064-48-8 HCAPLUS

CN 2,7-Naphthalenedisulfonic acid, 4-amino-5-hydroxy-3-[(4-nitrophenyl)azo]-6-(phenylazo)-, disodium salt (9CI) (CA INDEX NAME)

●2 Na

RN 9003-01-4 HCAPLUS

CN 2-Propenoic acid, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

```
25087-26-7 HCAPLUS
 CN
     2-Propenoic acid, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)
     CM
     CRN 79-41-4
     CMF C4 H6 O2
    CH<sub>2</sub>
Me-C-CO2H
     ANSWER 49 OF 49 HCAPLUS COPYRIGHT 2004 ACS on STN
ΑN
     1983:563839 HCAPLUS
DN
     99:163839
ED
     Entered STN: 12 May 1984
TI
     Hair dye aerosols
     Kashiwa Kagaku Kogyo K. K., Japan
PA
     Jpn. Kokai Tokkyo Koho, 3 pp.
     CODEN: JKXXAF
DΤ
     Patent
LA
     Japanese
IC
     A61K007-13
    62-3 (Essential Oils and Cosmetics)
FAN.CNT 1
     PATENT NO.
                        KIND
                                        APPLICATION NO.
                              DATE
     ______
                        ____
                              -----
                                         -----
     JP 58124713
PT
                        A2
                              19830725
                                        JP 1982-5911
                                                               19820120
     JP 63017806
                       B4
                              19880415
PRAI JP 1982-5911
                              19820120
CLASS
               CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
 JP 58124713
               IC
                      A61K007-13
    Novel hair dye aerosols consist of coloring agents, mica, resins (such as
     methacrylic acid polymer [25087-26-7]), solvents, and
     propellants with mica and coloring agents at a ratio of 40:60-90:10.
     Thus, an aerosol contained 35 parts of a mixture containing, Me Ph siloxane
0.2,
     nonionic surfactants, 0.2, glycerol 0.2, sesame oil 0.4, titanium mica
     15.0 TiO2 1.0, phthalocyanine blue [147-14-8] 1.8, resins 12.6, perfumes
     0.2 and EtOH 68.4% and 65 parts of Freon.
    hair dye aerosol; mica hair dye aerosol
ST
    Mica-group minerals, biological studies
IΤ
    RL: BIOL (Biological study)
        (hair dye aerosols containing)
    Hair preparations
IΤ
       (dyes, aerosols)
TΤ
    147-14-8
              518-47-8
                         6358-85-6 6448-95-9 25087-26-7
    RL: BIOL (Biological study)
       (hair dye aerosols containing)
IT
    6448-95-9 25087-26-7
    RL: BIOL (Biological study)
       (hair dye aerosols containing)
    6448-95-9 HCAPLUS
RN
    2-Naphthalenecarboxamide, 3-hydroxy-4-[(2-methyl-5-nitrophenyl)azo]-N-
CN
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Page 156

ELHILO 09/663942 8/20/04

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phenyl- (9CI) (CA INDEX NAME)

RN 25087-26-7 HCAPLUS CN 2-Propenoic acid, 2-methyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 79-41-4 CMF C4 H6 O2

$$\begin{array}{c} \text{CH}_2 \\ || \\ \text{Me--C--CO}_2 \text{H} \end{array}$$

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